

*The Business Man's
Encyclopedia*


Volume II



Presented to
The Library
of the
University of Toronto
by

Professor J. Ellis Thomson.

ack'd to Professor Ellis Thurner,
Dept. of Mineralogy, Univ. of T.



Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

FEC
B9783

THE BUSINESS MAN'S ENCYCLOPEDIA

A Hip-Pocket Business Counsellor—A Pigeon-Hole Legal
Adviser—An Office Hard-Nut Cracker—A Commercial
Britannica—A Business Man's Guide Book,
Combined Into Two Volumes—As full
of facts and useful information as
a plum pudding is of plums

COMPILED BY 27 EXPERTS

Who have worried about as you have worried about—worked
over as you have worked over—solved as you want
to solve—the vexatious business questions
and legal points these two little
volumes so readily answer

[Vol. II]

371791
23.10.39

THE SYSTEM COMPANY
CHICAGO

**COPYRIGHT 1905, BY
THE SYSTEM COMPANY**



CONTENTS

VOLUME II

BOOK III—BUSINESS DICTIONARY—161-179

Definition of Terms.....	161	Abbreviations and Signs.....	175
--------------------------	-----	------------------------------	-----

BOOK IV—BUSINESS SYSTEMS—180-220

Banking.....	181	Factory Shipments.....	201
Mail Order Business.....	187	Soliciting.....	205
City Trade.....	191	Law.....	208
Correspondence.....	192	Numerical System of Filing.....	211
Advertising.....	194	Business Advice.....	213
Filing Want Cards.....	198		

BOOK V—BUSINESS TABLES—221-278

Duties on Imports.....	221	Tables of Interest, Dis- count, etc.....	262
Tables of Weight, Meas- ure, etc.....	228	Interest Tables.....	264
Punctuation Marks and Rules.....	240	Estimating Profits.....	270
Printing Tables.....	244	Aliquot Tables.....	271
Proof-Reading.....	245	Rapid Calculation Ta- bles.....	274
Geographical Tables.....	250	Metric System.....	276
Citizenship Table.....	261	Marking Goods.....	277

INDEX—279-314

The Business Man's Encyclopedia

BOOK III

BUSINESS DICTIONARY

All of the common terms used in business and commerce are defined elsewhere in these volumes and may be easily referred to by consulting the index. All necessary terms not so defined are here listed for consultation. A number of words defined here are more fully treated elsewhere, for which treatment the user is referred to the index.

A

A1. First class; without a superior.

abatement. In contracts, a creditor's reduction of claim.

"A" bond. One of the first of a series of bonds designated alphabetically.

absolute indorsement. An indorsement binding the indorser to pay when notified that the prior parties have failed to do so.

absorbed. Subscribed for;—applied to bonds, etc.

account. 1. The record of any business transaction.

2. On the stock exchange, the extent of speculative positions open.

accrued dividend. The increment accumulating at any time before a regular dividend payment.

acquittance. An acknowledgment of the payment of a debt.

actual assets. Money; property of certain value.

adjustment bond. A bond issued to secure money, as for improvements.

adjustment mortgage. 1. A mortgage usually covering improvements. 2. A second mortgage.

afloat. Designating grain on passage.

allocation. Apportionment; allotment; assignment.

- allotment.** 1. Share or portion. 2. In underwriting, the amount assigned a member or subscriber.
- all-'round price.** Overhead price.
- arbitrage.** Purchase and sale of the same thing in different markets.
- arrha.** Earnest money. [Latin.]
- assessment.** A demand upon stockholders for a specified sum per share of stock.
- assets.** Total worth of property;—as of a person.
- aval.** Guaranty; indorsement.
- average book.** In banking, a book recording the average credit balances of depositors.

B

- backing.** Indorsement.
- balance sheet.** A tabular statement showing assets and liabilities, profit and loss.
- ballooning.** Inflating a stock value. [Colloquial.]
- bear.** A speculator believing in lower prices; one who sells stock short to buy back at a lower price.
- bearing the market.** Working to force prices down.
- bid and asked quotations.** Quotations furnished by stock specialists, the nominal prices of the day on the stock exchange.
- blanket mortgage.** A general mortgage.
- blind pool.** A money pool to be used at the manager's discretion.
- block.** A large number of shares.
- board of trade.** 1. An organization formed to promote mercantile or commercial interests. 2. An exchange or trading organization the members of which conduct large speculative operations.
- bond.** A secured certificate of obligation to pay money.
- bonded.** Secured by some guaranty.
- bonus.** A premium or gratuity.
- books close.** That time, prior to a dividend payment, at which ownership of securities may not be changed in the record;—opposed to *books open*.
- books open.** The opposite of *books close*.
- book value.** Stock value based on earnings.

- branch bank.** A bank under the control and supervision of a larger bank;—not permitted under the national bank act.
- bucket shop.** A place where bets are placed on regular exchange quotations.
- bucketing of stocks.** Sales by a broker—for his own account and risk—against customers' purchases, or purchases by the broker against customers' sales.
- budget.** An estimate of probable revenues and expenditures by the government in the ensuing year with affecting measures. [English.]
- bull.** A speculator believing in higher prices; one buying in expectation of a raise.
- bulling the market.** Working to make prices higher.
- buyer four, ten, twenty, etc.** Bought for delivery on any day demanded by the buyer within the number of days specified (4-10-20-etc.) on one day's notice to the seller.
- buying back.** Purchasing a stock previously sold without ownership.
- by-bidder.** A side bidder at an auction to raise prices.
- by-laws.** Rules, subordinate to a constitution or charter, adopted by an association or corporation for the conduct of its affairs.

C

- call.** A contract binding the issuer to deliver on demand to the holder agreed stock within a certain time at a certain price.
- called bond.** A bond issued with the privilege of redemption after a certain time, interest to cease on such call.
- call loan.** A loan payable on demand.
- capital.** Available wealth or money.
- Captain of Industry.** A leader in the creation and development of important industries in the United States.
- cash assets.** Assets in money or readily convertible into money.
- cats and dogs.** Worthless securities. [Colloquial.]
- charges forward.** Designating charges to be paid by the receiver of the property.

Chicago check. A form of check having the dollar mark to be followed by the amount in figures, at the end of the line for the payee's name.

c. i. f. Cost, insurance, and freight included.

circular letter of credit. See *traveler's letter of credit*.

circulation. 1. Money in use. 2. Notes issued by national banks.

classified bonds. Bonds disposed in two or more classes, as designating the payment of interest or maturity.

classified stock. Stock disposed in two or more classes, as first, second, and third preferred.

close corporation. A company the stock of which is held by a few persons and is not on the market.

closed for dividend. Not open pending a dividend payment;—said of stock.

closing prices. On the stock exchange, the prices at which the last sales are made.

coining rate or value. The valuation as compared with gold at which silver is coined as opposed to its actual bullion value.

collateral loan. A loan on paper secured by a pledged security.

collateral note. A promissory note secured by a pledge.

collection charge. A charge for collecting out-of-town paper.

commitment. The act of giving an order to buy or sell.

community of interest. Joint ownership or control for the maintenance of harmonious relations.

commutation, commuting. See *compounding*.

compensatory damages. An amount adjudged equivalent to a sustained loss.

composition. A partial payment of creditors accepted by them as a full payment.

compounding. The payment of several successive obligations by substituting a lump sum.

concessionaire. One who obtains a grant.

consignee. The one to whom goods are sent.

consignment. Goods shipped or forwarded by one person to another.

consol. A consolidated stock or bond, an abbreviation of consolidated annuities.

- consolidated bond.** One of an issue of bonds taking up and replacing two or more previous issues.
- consolidated mortgage.** A mortgage replacing two or more mortgages previously made.
- constant.** In finance, a fixed value.
- construction account.** The account showing the amount of building and equipment investment, as of a railroad.
- continued bond.** A bond which may be held after maturity, then bearing the same or a different rate of interest.
- contribution.** An indemnifying payment made to one of a number of parties jointly responsible for a debt by those not participating in the payment.
- controlling company.** One owning control though not operating another company.
- cooked.** Garbled or manipulated;—said of an account or report.
- corner.** The condition of the market with respect to a commodity which has been bought up with a view to monopoly.
- coupon.** The detachable form showing the amount of interest due at a certain date, being negotiable the same as a check.
- coupon bond.** An unregistered bond payable to bearer.
- crossed check.** A check bearing on its face, certain words making it payable only at a bank;—used only in England.
- cumulative stock.** Preferred stock bearing a dividend, which if not paid regularly, accumulates, and must be paid before a dividend on common stock.
- current assets.** Such assets as change from day to day.
- current liabilities.** Liabilities changeable daily.
- cutthroat mortgage.** A mortgage so drawn as to cut off the mortgagor's right of summons or notice and recourse,—not sustainable in equity.

D

- dating.** Extension of credit beyond the ostensible term by placing the date ahead.
- dead assets.** Unproductive assets.

- debenture.** A certificate of debt; unless secured, a promissory note.
- declaration of trust.** Acknowledgment by a person holding a title to property that the virtual ownership vests in another.
- deferred bond.** A bond the interest of which is put off for a certain period.
- demurrage.** A charge for holding cars or vessels beyond a specified time.
- differential rate.** In transportation, a lower rate to the same or competing points.
- direct liabilities.** Determined, undisputable obligations.
- discussion.** A proceeding in which a surety exhausts his principal's property before becoming liable himself.
- dividend.** A profit paid to a holder of a stock.
- dividend off.** Not carrying a declared dividend with the sale;—said of a stock.
- dividend on.** Including dividend due.
- divisional bond.** A bond under a mortgage on property in one railroad division.
- domestic exchange.** Drafts drawn at one place and payable at another place in the same country.
- domiciled.** Payable at (a certain place).
- double-name paper.** Paper bearing an indorsement.
- drawback.** A rebate.
- drawn bond.** One of a number of bonds determined for payment by lot.

E

- equipment bond.** One of a series of bonds given for money to equip a railroad with rolling stock.
- equity.** The difference between the value of encumbered property and the incumbrance standing against it.
- exchange.** 1. The payment of an obligation in one place by the transfer of credit from another place. 2. A draft. 3. A place where purchases and sales are made.
- ex-coupon.** Having the coupon for the current interest payment detached;—said of a bond.

- ex-dividend.** Not including dividend;—said of a stock sold on or after the day the transfer books of a corporation close.
- ex-drawing.** Not including any advantage accruing to the buyer if drawn for redemption. [English.]
- ex-interest.** Not including interest.
- ex-rights.** Carrying with sale no rights recently granted holders;—said of a stock.
- ex-ship.** Free of charges up to the time of discharge from the vessel.
- ex-store.** Subject to all charges after leaving storage.
- extended bond.** A bond upon which extension of time has been granted.
- extension bond.** A mortgage bond covering a railroad extension.

F

- fiat money.** Money by decree of the government.
- finance committee.** A board directing monetary affairs.
- financial statement.** A balance sheet.
- first mortgage.** A mortgage that must be satisfied before all others.
- fiscal year.** The twelve months considered a year in financial operations, that of the United States government ending on June 30.
- fixed capital.** Property in its final form and capable of continued use in production, as machinery.
- fixed charge.** A certain charge becoming due at stated intervals.
- fixed debt.** A debt of some permanence, as a debt represented by bonds.
- floating.** Marketing; selling;—said of bonds or stock.
- floating capital.** Property in a changing form, as that invested in articles being manufactured.
- floating debt.** Indebtedness not represented by securities.
- floating stock.** Stock not held permanently.
- forced loan.** A loan made to conform to the requirements in hand, as that of a bank which has paid an overdraft afterwards not covered.
- foreign exchange.** Drafts drawn in one country payable in another; the system so used.

founders' shares. Shares formerly issued to the promoters of a company.

free coinage. Coinage of money without charge or deposit of metal, extended in the United States only to gold.

free overside. Same as *ex-ship*.

freight. 1. Anything transported by a carrying company. 2. Charges for transportation of the heavier class of goods.

full-stock. Stock at the face value of \$100.

funded debt. Outstanding debts converted into bonds or annuities.

G

general mortgage. A blanket mortgage.

gold bond. A bond payable only in gold, principal and interest.

gold point. That period in the buying and selling of foreign exchange when it permits the importation or exportation of gold.

gold reserve. The fund in gold, \$150,000,000, set aside in the United States treasury for the redemption of greenbacks.

government depository. A national bank designated to receive government deposits.

gross earnings. Total earnings.

guaranteed bond. A bond issued by one company and having the principal and interest guaranteed by another.

guaranteed stock. A stock issued by one company and guaranteed by another.

H

half-stock. Stock the par value of which is \$50.

holding company. Same as *securities company*.

hypothecation. The pledging of any property, as securities, as collateral for loans.

I

in bond. Held under bond or in trust.

indorsed bond. A bond bearing an indorsement not properly pertaining to it. According to New York stock exchange rules such a bond must be designated "indorsed," when offered for sale.

- industrial stock.** Stock of a manufacturing company.
- initialed check.** A check bearing the initials of a cashier or paying teller, signifying that the signature is correct.
- interim dividend.** Division of profit before the final yearly dividend is declared.
- international stock.** A stock dealt in in foreign exchanges.
- investment securities.** Stocks, bonds, or the like, considered as safe and desirable as regards dividends.
- iron-clad note.** A collateral note.
- irredeemable bond.** A bond which can not be paid off, now rarely issued.
- irredeemable currency.** Fiat money.
- issue.** 1. In law, the first delivery of a negotiable instrument in complete form to the holder. 2. In finance, the outstanding stock or bonds of a company.

J

- joint bond.** A bond on which two or more parties are bound, as in certain railroad issues.
- joint mortgage.** A mortgage issued jointly by two or more parties.
- joint-stock company.** A company having its capital stock divided into shares of equal amount.
- judgment note.** A promissory note bearing a warrant of attorney authorizing the entry of a judgment without process against the maker in case of non-payment.
- junk.** Cats and dogs. [Colloquial.]

K

- kiting.** The incurring of a fresh obligation to discharge an old one, as by exchanging checks with a confederate.
- knocked down.** Sold at the price bid, said of goods auctioned.

L

- land grant bond.** A bond issued under a land grant mortgage.
- land grant mortgage.** A mortgage on a grant of land, for the issuance of bonds.

leased line. A railroad held by another subject to a lease.

limited liability. Responsibility of stockholders for company debts only to the amount of stock held; indicated by the word "Limited" in the title.

liquid assets. Assets in cash or readily convertible into cash.

listed stocks. Stocks included in the list of those admitted to dealings at an exchange.

long and short haul clause. A clause in the interstate commerce law prohibiting a greater comparative charge for freight transportation for a short distance, than for a long distance under similar conditions.

M

marked check. A check bearing a private mark without which it is not valid.

merger. A trust.

mileage. 1. The number of miles in a railroad. 2. Distance traveled. 3. Transportation issued in continuous slips to be lifted by the conductor as used.

mortgage. A lien upon property to secure a debt, becoming void upon the payment of the obligation.

municipal bond. A bond issued by a borough, town or city having a self-governing charter of incorporation.

N

negotiable instrument. Any paper that may be transferred by assignment, indorsement or delivery.

net. 1. Clear of all expense, as earnings. 2. Not subject to any deduction, as a price.

net cash. Immediate payment; payment on delivery of the goods.

nominal assets. All assets, particularly those of doubtful value.

non-assented stock or bonds. Stock or bonds held by parties refusing to deposit their securities on a readjustment of the affairs of a corporation.

non-assessable stock. Stock not to be assessed.

non-cumulative stock. Stock on which no passed dividend has to be made good;—opposed to *cumulative stock*.

no protest. Not to be protested if not paid.

nude contract. A contract without a consideration.

O

obligatory bond. Any bond having the interest at a fixed rate payable at designated intervals.

operating company. The company carrying on a road, the ownership of which vests elsewhere.

option. The purchased privilege of either delivering a specified amount of something at a specified price within a specified time, or calling for and receiving such delivery.

optional bond. A bond that may be retired by the issuer at a designated earlier date.

overcapitalization. Capitalization for an amount not warranted by the profits.

overcertification. The certification of a check by an officer of a bank, the drawer not having sufficient funds to cover it.

overdraft. A check drawn on a bank not having sufficient funds to the credit of the drawer.

overhead price. A price covering cost and all charges.

overissue. Issue of stock beyond that authorized.

overlying mortgage. A mortgage subsequent in claim to another mortgage.

P

paid-up stock. Stock paid for in full.

paper profits. Probable profits from transactions not closed.

par. Face value.

parent company. A company from which other companies derive authority.

parity. A price (of a stock) equivalent or equal to the price of the same stock quoted on a different basis.

par list. A list issued by a bank to correspondents or customers, giving a list of cities and towns the checks of which will not be charged exchange.

- participating bond.** A bond sharing in a distribution of profits as well as a guaranteed interest.
- passing a dividend.** Failure to make a regular dividend.
- passive bond.** A non-interest bearing bond having some other benefit attached.
- plain bond.** A bond having no mortgage or collateral security and without a sinking fund provision.
- plant.** The permanent appliances necessary to conduct any business.
- pool.** Interests joined for mutual advantage, specifically, (a) a trust or combination to regulate prices; (b) a fund contributed by several persons for a specified use.
- postdated.** Bearing a future date.
- preferred stock.** Stock which must receive a dividend and participate in a distribution of assets before common stock.
- premium.** 1. The amount of excess over the par value.
2. The sum paid by a policy-holder for insurance.
- private company.** A close corporation. [English.]
- promoter's stock.** Stock issued one interested in the promotion of a company, for services rendered.
- proprietary company.** A controlling company.
- protest waived.** Without necessity of protest (to indorser).
- proxy.** A person authorized to represent another; also, the instrument granting such authority.
- put.** A contract by which one person, in consideration of money paid to another, acquires the privilege of selling or delivering to the latter within a certain time some designated article at a stipulated price.

Q

- quarter-stock.** Stock at the par value of \$25.
- quick assets.** Property quickly convertible into cash.
- quid.** One pound sterling. [English.]
- quotation.** Price. On the stock exchange quotations for stock are in eighths of one per cent, while quotations for grain, pork, lard, short ribs, and silver are in eighths of a cent. Cotton and coffee quotations are in hundredths of a cent.

R

- redeemable bond.** A bond payable at a specified future time.
- redemption drawing.** The determination by lot of those bonds to be redeemed and paid.
- registered bond.** A bond recorded in the owner's name.
- registered coupon bond.** A bond bearing coupons payable to bearer, but itself payable only to owner.
- registered stock.** Stock recorded in the company books and transferable only by surrender of the stock-certificate, not by indorsement. [English.]
- registrar.** The keeper of the records of transfers of securities, verifying the signatures of registered owners.
- rehypothecation.** The hypothecation by a broker of securities hypothecated to him. Such act is illegal without the consent of the owner of the collateral.
- released indorsed bond.** A bond bearing an acknowledgment of relinquishment of title, taken before a notary public.
- reorganization.** Compulsory financial reconstruction.
- resources.** The collective amount of cash and property equivalent to cash.
- restrictive indorsement.** An indorsement so worded as to qualify further negotiability.
- right.** 1. The privilege to subscribe (a certain amount) to an issue of a security. 2. In underwriting, an allotment or accepted subscription.

S

- scrip.** 1. A certificate for a fraction of a share of stock, usually exchangeable for shares when presented in sufficient quantities. 2. United States paper currency of less than \$1 denomination,—not now issued.
- seasoned securities.** Stocks or bonds having an established value.
- securities company.** A company owning the securities of other companies and depending for its income upon the income derived from such securities.
- seignorage.** The difference between the cost of the bullion in a coin and the value of the coin minted.

seller four, ten, twenty, etc. Sold for delivery on any day desired by the seller within the number of days specified (4-10-20-etc.) on one day's notice to the buyer.

seller's option. A put.

serial bonds. Bonds redeemable in specified installments.

single-name paper. Unindorsed paper.

sinking fund. A fund to which are added certain amounts of money at specified times to close off a debt.

sinking-fund bond. A bond to be paid by a sinking fund.

sinking-fund mortgage. A mortgage to be paid by a sinking fund.

slow assets. Property not to be quickly turned into cash.

sola. A foreign bill of exchange drawn singly.

special aid bond. A bond issued by a government or municipality to facilitate a beneficial enterprise.

special assessment bond. A municipal bond issued payable by a special tax levied upon property improved by the fund originating the bond.

state check. A check not presented for a considerable time.

sub-company. A subsidiary company.

subsidiary company. A company the stock of which is owned or controlled by another company.

surplus. Profit remaining after deductions are made.

syndicate. A number of capitalists uniting to finance and carry out some plan or scheme.

T

tack. The direction in which a speculator's interest lies.

tax bond. A state bond receivable for taxes.

time loan. Money borrowed for a specified period.

ton-miles, ton-mileage. Number of miles total tonnage was hauled by a railroad.

train-miles, train-mileage. Number of miles made by a railroad train or trains.

transfer agent. An officer authorized to transfer a company's stock.

traveler's letter of credit. A draft issued payable in such amounts as desired by various domestic and foreign correspondents.

turn over. The total business transacted by a concern in a given period.

U-Z.

underlying mortgage. A prior mortgage.

unfunded debt. A floating debt.

utter. To issue, as forged paper.

via. A bill of foreign exchange, drawn in duplicate or triplicate.

voting trust. The placing of all or part of the stock of a company in a trust for voting purposes.

when issued. Deliverable when, and as if issued—said of a stock.

working capital. Money necessary for operating expenses.

X. Same as *ex*.

x-d. *Ex*-dividend.

yield. Percentage of return in dividends.

ABBREVIATIONS AND ARBITRARY SIGNS USED IN BUSINESS

A. or Am.	America; American.
A1	First class.
Acct. or acct.	Account.
Acct. Cur.	Account Current.
Acct. Sales	Account of Sales.
Adv. or adv.	Advertisement.
Agt.	Agent.
A. M.	Forenoon; Master of Arts.
Amt.	Amount.
App.	Appendix.
Asst.	Assistant.
Atty.	Attorney.
Av. or Ave.	Avenue.
Bal.	Balance.
B. B.	Bill book.

bb l.....	Barrel.
bd l.....	Bundle.
Bk	Bank.
bk ts.....	Baskets.
B/L	Bill of Lading.
Bld	Building.
Bot	Bought.
B/S	Bill of Sale.
bu	Bushel.
bx	Box.
c	Cent.
Cash	Cashier.
C. B	Cash book.
Chgs	Charges.
Ck	Check.
Co	Company; County.
C. O. D	Collect on Delivery.
Coll	Collection; collector.
Cr	Creditor; credit.
cwt	Hundredweight.
da	Day; days.
Dept	Department.
Dft	Draft.
Disc	Discount.
do	The same.
doz	Dozen.
Dr	Debtor; doctor.
Dray	Drayage.
E. & O. E	Errors and omissions excepted.
ea	Each.
e. g	For example.
Esq	Esquire.
etc. or &c	And so forth.
Ex	Express; example.
Exch	Exchange.
fig	Figure; figures.
F. O. B. or f. o. b	Free on board.
Fol	Folio.
Fr t.....	Freight.
ft	Foot; feet.
gal	Gallon.
gr	Grain.

gro.....	Gross.
hhd.....	Hogshead.
hund.....	Hundred.
I. B.....	Invoice book.
i. e.....	That is.
in.....	Inch; inches.
ins.....	Insurance.
inst.....	Instant; the present month.
int.....	Interest.
inv.....	Invoice; Inventory.
J.....	Journal.
Jr. or jr.....	Junior.
kg.....	Keg.
lb. or tb.....	Pound.
L. B.....	Letter Book.
L/C.....	Letter of credit.
Led.....	Ledger.
L. F.....	Ledger folio.
Ltd.....	Limited.
M.....	Thousand.
Mdse.....	Merchandise.
Mem.....	Memorandum.
Messrs.....	Gentlemen; Sirs.
Mfg.....	Manufacturing.
min.....	Minute.
Mme.....	Madam.
mo.....	Month.
M. O. D.....	Mail Order Department.
Mr.....	Mister.
Mrs.....	Mistress.
MS.....	Manuscript.
MSS.....	Manuscripts.
Mtg.....	Mortgage.
N. A.....	North America.
N. B.....	Take notice.
No. or no.....	Number.
N. P.....	Notary Public.
O. K.....	All correct.
Oz. or oz.....	Ounce.
p.....	Page.
Payt. or payt.....	Payment.
pc.....	Piece.

pcs.....	Pieces.
Pd.....	Paid.
per cent.....	By the hundred.
pk.....	Peck.
pkg.....	Package.
P. M.....	Postmaster; afternoon.
P. O.....	Post Office.
pp.....	Pages.
pr.....	Pair.
Pres. or Pt.....	President.
prox.....	Proximo; of the next month.
pt.....	Pint.
P. S.....	Postscript.
qr.....	Quire; quarter.
qt.....	Quart.
Recd.....	Received.
Reg.....	Registered.
Retd.....	Returned.
Rev.....	Reverend.
R. R.....	Railroad.
Ry.....	Railway.
S. B.....	Sales Book.
Sec.....	Secretary.
Shipt.....	Shipment.
sq. ft.....	Square feet.
Sr.....	Senior.
St.....	Street; saint.
Str.....	Steamer.
Sunds.....	Sundries.
Supt.....	Superintendent.
Tr.....	Transpose.
Treas.....	Treasurer.
ult.....	Ultimo; of the last month.
U. S. M.....	United States Mail.
via.....	By way of.
viz.....	Namely; to wit.
vol.....	Volume.
vs. or v.....	Against.
W/B.....	Way bill.
wk.....	Week.
wt.....	Weight.
Yd. or yd.....	Yard.

Yr. or yr.....	Year.
a/c.....	Account.
@.....	at or to.
%.....	Care of.
c.....	Cent.
✓.....	Check mark.
\$.....	Dollar.
#.....	Number, when before, pounds, when after a figure.
%.....	Per cent.
1 ¹	One and one-fourth.
1 ²	One and one-half (two-fourths).
1 ³	One and three-fourths.

BOOK IV

BUSINESS SYSTEMS

As an aid to office economy and the proper administration of business affairs, the card-index system stands as the greatest improvement over old methods that has been or ever can be introduced. Card systems enable a vast volume of work to be handled by low-priced help that formerly came within the province of high-salaried office workers, leaving the managers of a business free from many annoying problems of detail, and giving them time for other and larger matters.

How Made.—Card systems are made up of record cards printed or ruled for receiving the proper records, arranged between guide cards which have edges projecting above the record cards. On these edges is printed or written the index matter necessary to locate readily any record card or cards desired. The cards stand on edge in drawers of convenient size. A single drawer may be complete in itself, may contain several complete systems, or may be part of a cabinet of any number of drawers desired.

ADVANTAGES OF CARD SYSTEMS.

Instant Reference.—The index cards guide one very closely to the card desired and an instant's fingering of three or four cards locates it exactly.

Unlimited Growth.—New cards can be inserted at any place and when the present cabinet is outgrown the cards can easily be transferred to a larger one without disturbing the records or arrangement. Better still, with a sectional cabinet simply add another section. Old material being continually removed makes room for new material.

Adaptability.—A variety of colors and shapes of record cards and colors and sizes of guide cards makes it possible to index and classify according to a variety of subjects.

Removal of Useless Matter.—When the information recorded on any card or cards becomes useless, it may be removed and destroyed or filed in a separate index for future reference.

Re-writing Not Required.—Information recorded on a card need never be re-written, but may be transferred from index to index until it is no longer of use, when it is removed and destroyed.

Cost of Maintaining.—The original outfit is purchased but once. The expense of new cards, purchased as occasion demands, is much less than for books of equal capacity.

Absence of Friction.—A system of units—only the parts necessary are removed for use and interruptions of the user are fewer and loss of time obviated.

Increased Capacities.—The labor is so subdivided that the numerous minor details may be performed by inexpensive help and the results of their labor made available for their superiors.

Encourages System.—Certain and exact places are provided for every record and its entry is not neglected. Adapt it properly to meet the requirements of a business and it will automatically furnish valuable information for the guidance of employes and manager.

Use of Card Systems.—The uses to which card systems may be put are well-nigh universal. While a system in one line has many features in common with systems in other lines, yet each is distinctive in that it is subservient to demands of the particular business of which it forms a part. The details of various systems as applied to specific divisions of business follow with illustrations of the forms used. In most cases the card system is used entirely, though in some cases minor modifications are introduced.

BANKING

An excellent system that is used by several metropolitan banks is described by Charles W. Reihl, the bank expert of Philadelphia. This gives numerous labor-saving uses of cards, particularly as an aid to the paying teller.

The Signature Book Versus the Card System.—The use of the card system for signatures is not new to bankers, although some have not yet done away with the old signature book, that cannot possibly be kept in the way that signatures should be kept. Some books are better than others, but none so good as a proper card system.

Many bankers who have adopted the card system use only two forms, one for banks and the other for firms, corporations and individuals. This will answer

CITY BANK CARD	AUTHORIZED SIGNATURES OF	DATED DEC. 1, 1902
	AMSTERDAM NATIONAL BANK, PHILA.	
TO THE MANUFACTURERS NATIONAL BANK, PHILADELPHIA, PA.		
THE SIGNATURES BELOW ARE THE ONES, AND ONLY ONES, DULY AUTHORIZED FOR YOU TO RECOGNIZE IN THE PAYMENT OF FUNDS OR TRANSACTION OF OTHER BUSINESS ON OUR ACCOUNT.		
	Lenned G. Smith.	PRESIDENT
	John A. Brown.	VICE PRESIDENT
PERSONS AUTHORIZED TO SIGN AND COUNTERSIGN DUE BILLS		
TO SIGN	Charles D. Hansen	CASHIER
TO SIGN	John B. Focson.	ASST. CASHIER
TO COUNTERSIGN	Cashier.	
TO COUNTERSIGN	President.	
TO CERTIFY CHECKS	Cashier or asst. Cashier.	
TO ENDORSE CHECKS	" " " "	
	J. Amador.	CASHIER
DATE	Nov. 30, 1902	

Figures I and II

to a limited extent, but separate cards for each would answer to an unlimited extent.

The system here given was prepared after much study and examination of other systems, and it has been very highly commended by those who are qualified to pass judgment on it. It is especially intended for the paying teller's department, because he, by the nature of his duties, is required to refer to the signatures more than anyone else in the bank.

Figure I is for the signatures of officers of banks in the same city where the bank issuing the cards is located. Figure II shows the back of the same card. The information given on the back may be of more use than that given on the face. The names given on all the cards here illustrated are fictitious, for it would not be right to take cards from the cabinet and use them in this way. The names given are simply to show how the cards look when filled up, and the information they give.

INDIVIDUAL CARD	AUTHORIZED SIGNATURES OF	DATE
	JOHN L. SUMMERWELL,	AUG. 12 '08
TO THE MANUFACTURERS NATIONAL BANK, PHILADELPHIA, PA.		
THE SIGNATURE BELOW IS THE ONE, AND ONLY ONE, YOU ARE TO RECOGNIZE IN THE PAYMENT OF FUNDS OR TRANSACTION OF OTHER BUSINESS ON MY ACCOUNT		
SIGN HERE	John L. Summerwell -	

BANK CARD	AUTHORIZED SIGNATURES OF	DATE
	AMERICUS NATIONAL BANK, KANSAS CITY, KANS.	JUNE 1 '08
TO THE MANUFACTURERS NATIONAL BANK, PHILADELPHIA, PA.		
THE SIGNATURES BELOW ARE THE ONES, AND ONLY ONES, DULY AUTHORIZED FOR YOU TO RECOGNIZE IN THE PAYMENT OF FUNDS OR TRANSACTION OF OTHER BUSINESS ON OUR ACCOUNT.		
ADDRESS	1293	
BUSINESS	Hav	
INTRODUCED BY	G	
	H. H. Falco -	PRESIDENT
	J. L. Garrett -	VICE PRESIDENT
	F. J. Peters -	CASHIER
	J. D. Alexander	ASST. CASHIER

Figures III and IV

The card for out-of-town banks is Figure III. The wording of the two printed lines, beginning, "The signatures below," etc., is a little different from that generally used. It is clearer and more to the point, giving special instructions, which become effective when the signature is placed below.

The individual card is shown in Figure IV. No comment about this is necessary, for it explains itself. But on the firm card (Figure V) the arrangement giving

place for the name of the person who signs for the firm is very useful. The question sometimes arises as to which member of the firm signed a certain check or note. Reference to this card would tell at once.

FIRM CARD		AUTHORIZED SIGNATURES OF		DATE
		SMITHERS, BROWNLEY & CO.		MAR. 15, '08
TO THE MANUFACTURERS NATIONAL BANK, PHILADELPHIA, PA.				
THE SIGNATURES BELOW ARE THE ONES, AND ONLY ONES, DULY AUTHORIZED FOR YOU TO RECOGNIZE IN THE PAYMENT OF FUNDS OR TRANSACTION OF OTHER BUSINESS ON OUR ACCOUNT.				
Smithers Brownley & Co.		BY W. S. Smithers.		
Smithers Brownley & Co		BY John Brownley		
CORPORATION CARD		AUTHORIZED SIGNATURES OF		DATE
ADDRESS		QUAKER HOUSEHOLD ART CO.		JUNE 21, '08
456 Arc		TO THE MANUFACTURERS NATIONAL BANK, PHILADELPHIA, PA.		
BUSINESS		THE SIGNATURES BELOW ARE THE ONES, AND ONLY ONES, DULY AUTHORIZED FOR YOU TO RECOGNIZE IN THE PAYMENT OF FUNDS OR TRANSACTION OF OTHER BUSINESS ON OUR ACCOUNT.		
Manufact		WIT IS HEREBY UNDERSTOOD THAT ONLY ONE SIGNATURE IS REQUIRED UNLESS OTHERWISE INSTRUCTED		
INTRODUCED BY		William Penn -		PRESIDENT
L. H. Rec		Philip A. Quaker -		VICE PRESIDENT
		H. T. Moneyo.		TREASURER
The signatures of Treasurer and President required -				
ADDRESS		1790 Chestnut St.		
BUSINESS		Furnishings and decorations -		
INTRODUCED BY		H. W. Hookers -		

Figures V and VI

The Valuable Points of This System for Banks.—All these cards, except those for banks, give a place for the address, business—that is, the nature of the business—and by whom the party was introduced to the bank. This information is often wanted, and will be found useful in many ways on many days.

Figure VI is the corporation card; on it is a clause stating that, unless otherwise instructed, only one signature is required. Frequently the treasurer's signature is the only one used, but in the case here given the bank is instructed that two signatures are required on each check or note. Without the special instructions the bank would be authorized to pay on any one of the three signatures given.

The same card (Figure VI) is to be used for trust companies, too, as shown in Figure VII. The nature of the business in this case is understood without making note of it.

Although seven forms are here given, there are only four different kinds of cards. The two for banks are the same on the face, but some had the form printed on the back, for use with banks in the same city.

TRUST CO. OR CORPORATION CARD	AUTHORIZED SIGNATURES OF	DATE
WILLIAM PENN TRUST CO. PHILA.		SEPT. 1 '08
TO THE MANUFACTURERS NATIONAL BANK, PHILADELPHIA, PA.		
THE SIGNATURES BELOW ARE THE ONES, AND ONLY ONES, DULY AUTHORIZED FOR YOU TO RECOGNIZE IN THE PAYMENT OF FUNDS OR TRANSACTION OF OTHER BUSINESS ON OUR ACCOUNT.		
IT IS HEREBY UNDERSTOOD THAT ONLY ONE SIGNATURE IS REQUIRED UNLESS OTHERWISE INSTRUCTED		
Edward Du Bois -		PRESIDENT
Geo C Cooper -		VICE PRESIDENT
Brown, Clark & Co		STOP PAYMENT ORDER
ADDRESS 12 th St	THE MANUFACTURERS NATIONAL BANK, PHILADELPHIA, PA.	DATE Nov. 1 1908
PLEASE STOP PAYMENT ON THE FOLLOWING CHECK: -		
BUSINESS	NO. 9783	DATE OF CHECK, Oct. 30, 1908
INTRODUCED BY	ORDER OF Smalley Hardware Co.	
	AMOUNT \$932.75	
	SIGN HERE Brown, Clark & Co.	
	ORDER CANCELLED Nov. 10, 1908 Brown, Clark & Co.	
	REASON Not lost, only delayed in mail.	

Figures VII and VIII

There is really only one objection to these cards; it is that they are too wide to be enclosed in an ordinary business envelope. They are four by six inches, and require a special envelope when sent through mail. If they were three and a half by six inches, they could be enclosed in an ordinary business envelope, and would not be so liable to be broken or torn in the mail. They could very easily be so printed.

An Important Feature of the Paying Teller's Department.—Another important matter with the paying teller's department is "stop payment" orders. These or-

ing the card system for signatures, let me make a suggestion: When you send out the cards, with letter asking for signatures, enclose an introduction card, like Figure IX, and ask them to use it in introducing someone to open an account with the bank. The typographical work might be better than that on this card, but it is the idea that is to be impressed upon you as a good one to use to bring business.

MAIL ORDER BUSINESS

A general outline of the mail order business is given on preceding pages, and following is outlined by O. F. Kohl, the handling of one of the most important parts of mail order work—the following up of inquiries.

Growth of Mail Order Trade.—Ten years ago the mail order business was new. It was confined to a few branches of trade; the number of concerns engaged in it was comparatively small, and their profits were large in comparison with the investment. Within the past few years conditions have changed. The number of mail order houses to-day is large; in consequence the profits are smaller. The progress in the business has produced a careful follow-up system for inquiries, which is an ever-present need. It is felt much more to-day than ten years ago, when the writer embarked in the business.

Advertising Necessary to Success.—The advertising expense of a mail order concern is perhaps at the outset its greatest item; in consequence the results which are obtained from that expenditure determine, in a large measure, what degree of success is to be vouchsafed to the manager of a mail order business. It is therefore necessary to make as much of these results as possible. It is absolutely necessary that the inquiries be pursued to the time where they produce a sale, or until those inquiries are found to be the result of mere curiosity. Just at what point this is determined is a mooted question with all mail order people, and may not here be dealt with. It is assumed in this business that every inquiry is the offspring of a desire to buy, and is treated accordingly. Everyone in the

company's employ follows closely the outline of this system and makes it a point to keep a record of every sale, the source from which it is derived and to keep a record of every inquiry in the same way. If a sale results from subsequent correspondence it is credited to its original advertising source.

A record is also kept of the advertising in the various mediums and of the results therefrom. In this way it is known which is the most productive and what advertising copy shows the greatest returns.

The image shows a stack of filing cards. The top card is a form with the following details:

- File Tabs:** F, G, H, I, J. The top tab is labeled "Des Moines".
- Top Row:** Numbers 1 through 28, with the number 26 circled.
- NAME:** R. L. Fields
- STREET:** 1425 Locust St
- TOWN:** Des Moines Iowa
- SOURCE:** System
- AD. NO.:** 23,334
- FORM LETTERS:** A B C D E F G H I J K L M N O P R S T U V W X Y Z
- SENT CATALOGUE:** April 4, 1903
- ORDERED:** (blank)
- INQUIRED FOR:** Watch # 324
- Handwritten:** "Inquiry" written diagonally across the bottom right section.

Figure I

Records of sales are kept by means of cards; and as the same system is used as with inquiries, the illustration serves the purpose of explaining both.

Recording and Filing Circularized Names.—Every mail order house has a list of names of people, obtained from advertising and auxiliary sources. These people are reached with circular letters and printed matter every three months, aside from the general advertising. For each person a card similar to the inquiry card (Figure I) is used, except that it contains

only the name and address. These cards are white and the division cards are buff. They are filed in sectional cabinets by states, which are sub-indexed alphabetically for the larger cities.

Whenever an inquiry is received, the white card is taken from the file and also the buff guide for that town and substituted for both cards of a salmon tint. The white card is then stamped across its face "inquiry," that in the future it may not be incorrectly filed if taken out for correspondence reference.

IOWA

D E F G H

NAME *J. L. Brownlee* System

ADDRESS *14 Willow St* D. 334

TOWN *Dunlap*

FORM LETTERS *f c d / f a n i j l k m n o p q r s t u v w x y z*

BEST CATALOGUE *July 6, 1903*

ORDERED *#2532*

Order

ORDERED FOR *Diamond Ring #2532*

Figure II

The same procedure is followed in regard to the sale, except that the word "order" is stamped on the white card (Figure II). These cards are then transferred to a separate file labeled "Inquiries" and "Orders." Thus, when circular matter is again sent out to the general list, those who may have inquired or bought are not reached.

The substitution of the salmon-tinted card with the address on it for the general file is to make the list complete, so that when correspondence comes in and the name is looked up, the clerk who looks after this will know at once whether the card is in the sales or inquiry box.

Use of Cards.—This system of filing separates the cards containing the records of those who have bought or may buy from those from whom no response has been had. To the latter, matter is sent at least every two weeks, and continued until some result is attained, or until satisfied that there is no further use in writing them. They are then transferred to a dead file. To this list are sent only special offers, but for all practical purposes they are on the dead list.

In following up the list in the inquiry and sales box, adjustable tabs are used, or should it be desired to indicate the date of a reply, a ring is placed around it (Figure II). This saves the necessity of removing the cards from their proper places in the file, and the destination acts as a puller for all of the correspondence. It will be noted that only the odd days in the month are used, as for all practical purposes these are sufficient. On the back of the cards is had space for the dates on which letters are written. These cards are then turned over to the stenographer, with the date when a reply is expected, indicated within the ring. The stenographer stamps the date on the letter, which is filed by a girl who has entire charge of this work, and who is held responsible for the errors. This rule is followed in every department and found profitable.

All the correspondence relating to one transaction is filed together, and a separate folder is made for each individual with whom any considerable correspondence is had.

This system saves time and enables the best results to be obtained from letter writing and general advertising. The color system is a valuable adjunct to the card system, and the manner in which this is run enables the keeping of cards in contact at all times, so that there is no difficulty in finding any desired information. If the number of inquiries were not large, the white card would not be removed from the box, but would have "inquiry" stamped upon it.

While this system was originally devised for the mail order business, in the manufacture of watches, jewelry and musical instruments, anyone giving it careful study will see at once that it is adaptable to any

mail order business, and those who desire to install it may rest assured that it has had the strong indorsement resulting from long and successful use.

WORKING UP CITY TRADE

In large jobbing centers the local or city trade is no small item when properly and systematically canvassed by salesmen who call upon their trade weekly, bi-weekly or monthly.

The following method was devised and used very successfully by W. Harry Forse, Jr., to meet the problem of working up a new and permanent local trade in one of the larger western cities. The line of goods was wire, sisal and manila rope, pulleys nad rope fittings. The method used is one which could be adapted to any business having outside local salesmen.

N					O					P					Q					R									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
NAME <i>New Newman & Co</i>										ADDRESS <i>46 Main St</i>																			
BUSINESS <i>Stone Quarry</i>										CITY <i>UC G3</i>					SALES <i>B Newman</i>														
CALLS <i>4/4/03</i>					<i>4/14/03</i>					<i>4/24/03</i>																			
SHOVED <i>4/14/03</i>																													
CALLS <i>4/14/03</i>					<i>4/24/03</i>																								
REMARKS <i>may use some Roisting wire rope Aug 10/03</i>																													

Figure I

List of Customers Called On.—The calling list, the first to be compiled, is obtained by taking a copy of the latest city directory and from its classified list selecting those businesses which give promise of using one or more kinds of the goods handled. Each name is written on a 3x5 card (Figure I), of which four colors were used to denote the different geographical sections

of the city. This is to aid the one salesman first started in routing his cards, in order to save time in making calls. Thus, white cards signify North, blue cards South, and so on.

Upon the card is written the prospective customer's name and street address, while spaces are left for insertion of the buyer's name and for dates of calls, quotations and sales.

Planning the Day's Work.—Each morning the salesman picks out and routs in regular order about twenty or thirty cards, laying out his day's work so as to avoid doubling back and forth over a certain territory. These cards the salesman takes in his pocket, and as he makes his calls, he makes notation of details regarding them. In the evening these cards are filed back in the cabinet, with date tab moved to show approximate date of next call. When found desirable to strike a name from the calling list, the card therefor is filed alphabetically in the back part of the cabinet, with the necessary notations.

CORRESPONDENCE

A simple plan aiding the busy correspondent is given by J. T. Mills.

Arrangement of File.—When arranging a correspondence file, care should be taken that not only must the letters be filed in such a manner as to be easily accessible, but that their contents be recorded so that whatever correspondence has already passed, concerning any subject which may be brought up, may be quickly brought to mind. The following system may be adapted, however, with few alterations, to meet the requirements of any business house.

Use of the Card Record.—A card record is kept of all letters received and written. These cards are filed alphabetically, according to the name of the correspondent. The form of the card shown in the illustration (Figure I) is about three by five inches. At the top is entered the name and address of the correspondent, and a file number is assigned to it. Under "Date" is written the day on which the correspondence is received, and under "Subject" is noted the gist of the

letter. If a letter is sent to any other place than the file proper, its destination is noted under "Disposition." All letters received are entered in black ink, while those sent out are entered in red. The object of this is apparent, as otherwise it would be necessary to have a card double the size of the present one to accommodate the extra columns required.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
NAME										ADDRESS										FILE NO.										
DATE											SUBJECT										DISPOSITION									

Figure I

Future Attention.—If the correspondence requires attention at a future date a small metal pointer or clip is placed over that particular date. As the pointers for any particular day are all in a row on the top of the file, the cards bearing them are easily withdrawn. Thus a double file is made; the cards themselves are arranged alphabetically and also according to date. This is especially convenient where a "follow-up" system is required.

When the matter which requires attention has been attended to, but requires further correspondence, the pointer is moved along to such date as desired. In this way attention is called to the card, automatically, at the proper time.

Filing of Letters.—The letters themselves are filed in open-topped drawers or boxes. Each correspondent is assigned a file number and his letters are placed in a large manila envelope and the several envelopes are filed numerically.

Advantages.—The advantages claimed for this sys-

tem are: First, when an inquiry or advice is received from a certain party, the correspondent may tell, by consulting his card, just what and when he wrote and what disposition was made of the letter. If it was placed in the regular file, the file number is given to the file boy and the complete correspondence is at hand. Second, all letters which require attention are automatically brought to notice each day by the pointers, which saves the time of looking over the cards each day. Third, a brief history of the previous correspondence is condensed into a small space, thus obviating the necessity of reading through all previous letters before the correspondent can "get his bearings."

ADVERTISING

The general principles of advertising have already been treated in a preceding article. Following is given by Arthur H. Vandenberg, a description of a method of placing advertising and of recording results which may be used to advantage by the wholesale and retail dealer alike.

Appropriations for Advertising.—Advertising appropriations run the entire gamut of expenditure, from \$50 a year to \$500,000 and more. They are framed by establishments with backing of millions and by the dealer renting deskroom on a side street. They often represent an expenditure in excess of the yearly cost of actual production and are always a dominating figure in the annual budget. The conclusion, then, is inevitable that advertising appropriations and advertising space should be just as diligently studied, just as carefully regulated, just as thoroughly systematized as any other branch of the modern business machine. Because of the comparative infancy of the "buying-by-mail" era in commercialism and because of the surprising indifference which often exists in the expenditure of an advertising appropriation, there is wide opportunity for "leakage" in the advertising department unless system is vigorously applied. The office manager or the advertising man can reduce the details of his task of keeping tab on the advertising appropriation to a

minimum by observing a simple card and loose-leaf reference system.

Form of Reference Book.—There should be a loose-leaf reference book, similar to that illustrated in Figure I and in Figure II. This is a preliminary essential unless complete dependence is to be placed on the figures given out by advertising solicitors and agencies. This is to be a book of ready reference, always up to date. At a glance the buyer of space may tell the circulation of a medium, the advertising rates, the size of page and dates of issue, and the character of circulation. Every card tells its own story.

NAME		SOURCE		FILE NO.
BUSINESS		ADDRESS		TEL.
LIKELY TO USE				
LITERATURE SENT	FORM LETTERS	WE	CALLED — C WROTE — R	RESPONSE

Figure I

Rates and Price Schedule.—In considering rates, the schedule of prices on space is no criterion. One magazine may sell a page for \$10 and another may charge \$1,000. Yet the \$1,000 page may be the more economical because it reaches more people, is read by more prospects than the \$10 page.

Size and Price Schedule.—Again, the size of the page must be considered. A page with ten inches for \$100 is more expensive than a page with twenty inches for \$150, although both have the same approximate cir-

ulation. The only common ground for comparison, therefore, is the rate a thousand circulation per inch of space. With all scheduled prices reduced to this basis, an impartial and reliable comparison may be made at a glance. The reference card, therefore, gives, above all else, the rate a thousand circulation an inch of space for every medium under consideration.

MAGAZINE <i>The Northwest.</i>		
ADDRESS <i>Chicago. Ill.</i>		
CIRCULATION <i>50,000</i>		RATES: PAGE: <i>\$ 150</i>
RATE PER 1000 CIR. PER INCH <i>60 cents.</i>		$\frac{1}{2}$ P. P. <i>75</i>
FORMS CLOSE <i>15th. mo. before.</i>		$\frac{1}{4}$ P. P. <i>50</i>
SIZE PAGE <i>6 x 10</i>	WIDTH COL. <i>3 in</i>	DATE OF ISSUE <i>20th</i>
CHARACTER <i>Circulates in Michigan, Iowa, Indiana Ohio, Illinois and Wisconsin. 60 percent are women.</i>		
REFERENCES <i>Smith, Marshall -</i>	<i>Boston, Mass.</i>	
<i>Peabody Bros</i>	<i>New York City.</i>	
REMARKS <i>Space next to reading matter may be secured for 20% raise in rates.</i>		

Figure II

Selection of a Medium.—The advertiser may desire to cover some particular field. He may be aided in his choice of mediums by the loose-leaf reference, which suggests at a glance the character of the circulation

of a medium and of the firms which have declared it a successful puller.

Results Shown by the Keyed Ad.—After the question of choosing the medium and of placing the contract is disposed of, the advertiser must carefully watch the results of his experiment. His advertisement has been keyed, perhaps by the business address, the department letter, the individual department head, or the

NAME John Smith.		ADDRESS Detroit, Michigan.	
INQUIRY July 9, 1903.		SOURCE Advs.	
INQUIRY CARD SENT July 10, 1903.		ANSWERED July 13.	
WANTS Desk for about \$20.00			
CONTRACT NO. 1029	FOR Desk.	AMOUNT \$20.00	TERMS 30 days.
LETTERS WRITTEN 7/19 7/21 10/1		RECEIVED 7/18 7/21	
DISPOSITION CARD SENT August 1			
DISPOSITION Take matter up in October.			
ORDER Oct. 3.			
PAID Nov. 7.			

Figure III

name of the catalog. He may safely check the returns with a card system similar to that suggested in Figures III and IV. In keying results it is again necessary to secure a common basis, and here it is the actual cost of every inquiry and sale. Again, the \$1,000 medium may be more economical than the \$10 one. The advertiser knows what he can afford to allow out of each sale to apply on the general account of publicity. He may tell by a glance at his card system whether a specific magazine is above or below the minimum standard. A single month, however, is not a fair test.

allowed for the jobber's quotations, the date of purchase, quantity bought, price paid, retail price and profits, all on one line.

Perpetual Record of Grades and Prices.—The cards are arranged alphabetically. When an article is out or wanted the card is placed in front of the "Wants" guide card. The buyer runs over his want cards every day, and each card shows him at a glance quotations, what he has paid, how much he has sold, and the profit made. This record may be kept for years. Different brands of an article can be quickly compared for selling and profit-earning qualities.

1903 QUOTED										BOUGHT				
MONEY	S. E. & CO.	S. BRDS.	S. CO.	DATE	QUANTITY	PAID	SELLS	PROFIT						
Lye - Lams - case 4 doz wt 42 lbs														
tq3	tqe	tqm.	tiz.	Aug 10	10 cases	tq3	dt.	ldg.						
tq3	tqe.	tiz.	tqn	Oct 20	10 "	tq3	dt.	ldg.						
tq3	tqm.	tqe	tpe.	Dec 20	10 "	tq3	dt.	ldg.						
					30			d1q3.						
	gan	12			5	tq3		aeq3						
					25 cases			dnp3						

Figure I

The want cards form a complete catalogue of stock, and in taking stock, save the time of writing out the articles and prices. The date, quantity on hand and extension may be written in red ink, and this stands for the inventory. The profits on each article for the year can be quickly added.

A want card can be made out as quickly as the item can be entered in a want book, and when once written it is good for ten, twenty, or as many orders as the card is made to accommodate.

The want card is the official price maker. If a clerk

cers would want cases and blank forms to go with the manufacturers' cards, and the manufacturers would want to use cards in order to have their advertising matter incorporated in the buyers' index-card system, as shown in Figure II.

Many manufacturers and jobbers give retailers want books, and the cards could be sold for the same purpose, the name or product being advertised on each card.

This system gives the buyer a uniform catalogue, and at the same time, by the use of color, cuts and artistic typography, the manufacturer can make his advertising more distinctive than it is possible in trade journals. If manufacturer's cards were sent out periodically, postage, express charges and printing costs would be reduced, and manufacturers and jobbers could be induced to send their changes, special information and quotations on cards.

FACTORY SHIPMENTS

This is an example of an adaptable system and one of value, contributed by Lawrence L. Hall.

This system, which was installed in the factory of Hilliard & Tabor, at Haverhill, Massachusetts, after many weeks of experimenting and a careful study of the needs of the factory, has now been in operation for a year, and works to the entire satisfaction of the company.

How Records Are Kept of All Orders.—At this factory the packing and shipping rooms are on the same floor. As the same man has to do with both departments, one card answers for two uses. The trade is divided between the jobbing and retail trade. The orders are entered in books, those from jobbers going into what is termed the "S" book, and retail orders in the "T" book.

On the customers' cards an initial is used to designate, such as "J" after the firm name of jobbers. The card also contains the page on which the order is entered. This is placed in the upper left-hand corner of the card (Figure I), and on the first ruled line is

stamped or written "File Page," which will be referred to and fully explained later. On the next line appear the shipping directions, which are written in pencil, so as to be easily erased in case of a change in routing. If there should be a change in routing the change is made immediately on the card, and should this necessi-

38	5	Cahn, Richelberg and Co	J
File page.	92.	San Francisco, Cal.	
Ship.	1/100	Sunset Route. 6 L. 9 Spence. 249 Broadway. New York City	
Mark.		Make no ship. under 125 lbs.	
Carton	White	Label	Cover Strip.
Special.		14 - 5 1/4 - 4 1/8 -	Labels from Hays.
		14 - 4 3/4 - 4 1/8	

Figure I

tate a change in the date of shipment, the entry and date is placed in the second column of the card (Figure I).

Handling the Routing of Orders.—The routing order is posted in a file, such as many firms use for filing

443	5	Jones, David & Co.	Export.
File page.		Sydney, N. S. W. Australia -	
Ship.		Can. Pac. via Vancouver.	
Mark Cases.		Gross weight, outside measurements "From H & T. U. S. 9" on cover "Made in America" on sides.	
Cartons	White	Label	Label from Hays
Special.			
Stamp	Cartons - Sample No 827		

Figure II

invoices, and the page number is placed in the second column, on the first line, in front of "File Page."

The entire correspondence from a customer is filed on this page, whether relating to shipping, marking

cases, cartons, labels or any other detail connected with packing or shipping.

A note of the customer's request and the date is also placed on the card, and as the file is always in reach of anyone who uses the index, reference to the original letter is a matter of one moment.

127	T	Waltinsky and Kayser Shoe Co.
File page.	171	Tanadena, Cal.
Ship.		M. P. Santa Fe -
		Wooden Cases - Special.
		White Label. top label.
Cartons.		Labels from Tolman.
Special	Men's	12 $\frac{3}{4}$ - 5 $\frac{1}{8}$ - 4
	Woo.	12 - 4 $\frac{3}{4}$ - 3 $\frac{1}{4}$ - gilt edge -
		above are outside measurements
		including case.

Figure III

"Special" Cards.—Some of the firm's customers require special marks or cases, so after the word "Mark" the requirements are placed. Should a customer use a regular carton, under "Carton" on the card is stamped "White" or "Stock," and, as a rule, no entry is made after "Wooden Cases," but if a carton is used with a label, "Special" is stamped after "Carton" and "Stock" after "Wooden Cases," and a note is also made of where the label is obtained.

When a carton of special size is used, the word "Special" follows both carton and wooden case. The dimensions of a carton are given, and, after the words, "Stamp Carton," the request of the customer as to stamping is carried out.

All of the foreign buyers of this firm wish the number of the sample from which the shoes were ordered stamped on the carton as a means of ready reference in case of future orders.

How Branch Stores are Distinguished.—Some of the customers have stores in two or more places, and a shipment to the wrong store is not pleasing to the

buyer. For instance, a customer has one store in Bakersfield, California, and another in Fresno. At the top of a card, similar to Figure III, a note may be made, reading, "Also at Los Angeles," and on the other card a notation will be made at the top, reading, "Not Pasadena."

#2

's. of pairs of Woo. Ex. and ⁶/₉ Boot cartons, packed in case-

10	Woo. Ex.	22	Woo. ex.	30	Woo. Ex.		
39	⁶ / ₉ Bt. 48 Bt.	25	⁶ / ₉ Bt. 44 Bt.	18	Bt. 44 Bt.		
12	Woo. Ex.	22	Woo. ex.	36	Woo. ex.		
14	Bt. 30 Woo. Ex.	12	Bt. 30	12	Bt. 44 Bt.		
14	Woo. ex. 24 Bt.			37	Woo. ex.		
12	Bt.			24	Bt. 55 Bt.		
13	Woo. ex.					58	Woo. ex. 60 Bt.
7	Bt. 18 Bt.					12	Bt.
17	Woo. ex.						
18	Bt. 35 Bt.						

Figure IV

Be it said in explanation of this system that the firm has cartons of different sizes for each store, varying considerably in dimensions, as the cards will be made to show. These cartons are designed to fit the shelves, and if a mistake were made, the ensuing trouble is apparent. At the time of shipment, before it is too late to mend matters, the index does its work admirably and trouble is saved both maker and buyer. Should shipments be made at the same time to both stores, the value of the index is even more appreciated.

"Capacity" Cards.—A feature which is of much service to this company, and one which has seldom if ever been used, is a card (Figure IV), showing the capacity of cases with cartons of a size different from the size it was designed to hold. Among the retailers orders have cases of a varying number of pairs, from one or two up, and it is quite necessary to see that every case is filled to its capacity. The notes on the card (Figure

IV) are not complete, but are of great use to refer to, as accurate estimates can be made from them.

On another card (Figure V) dimensions of cases for special size cartons are noted, and in an emergency

No. of woo. ex. cartons that will pack in $\frac{1}{4}$ boot & mens cases.					
	in 12 mens	41	in 33 mens	54	in 48 mens
	" 12 boot	40	" 33 boot.		" 48 boot
16	" 15 mens		" 36 mens	61	" 50 mens
17	" 15 boot.		" 36 boot		" 50 boot.
	" 18 mens	45	" 39 mens		" 52 mens
22	" 18 boot		" 39 boot.		" 52 boot.
	" 21 mens	49	" 40 mens	68	" 55 mens
25	" 21 boot		" 40 boot.	67	" 55 boot
28	" 24 mens		" 42 mens	76	" 60 mens
	" 24 boot.		" 42 boot		" 60 boot.
38	" 30 mens	53	" 44 mens		
	" 30 boot		" 44 boot.		

Figure V

the size of the special case demanded may be compared to the regular cases of about the same size, and a fairly good fit is secured in most cases.

SOLICITING

Following is given, by A. C. Hanbold, Special Agent, Equitable Life Assurance Co.; a system using a two-card record. While here applied to insurance, it affords valuable pointers to a solicitor in any line of business.

The insurance solicitor who makes a business of writing insurance instead of regarding it as a make-shift from which he expects to retire as soon as possible finds that in order to keep track of his customers and prospective customers he must start some system by which he can keep on record the names and circumstances of these men and some essential facts regarding them.

List of Prospects.—The man who is active in the insurance business to-day will have probably two hundred men and women on his list with whom he wishes

to keep in touch. It is impossible for him to keep all the facts regarding these people in his head or on odd slips of paper. The system here described is very simple, entails the minimum of work, and is inexpensive, but wholly satisfactory, for it does all that is required.

A Mechanical Aid to Memory.—When a person whom the solicitor wishes to approach is first brought to his attention, his name is placed on a buff colored card, ruled as shown in Figure I, with such facts in the blanks as may be known concerning the individual in question. Blanks are left for records of interviews and appointments, as well as for facts which may be learned in the course of the labor with this man.

INTERVIEW	NAME
	BUSINESS ADDRESS
	RESIDENCE
	BUSINESS
	INSURANCE IN FORCE
	AGE
APPOINTMENTS	FORM OF POLICY SUGGESTED
	REMARKS

Figure I

Filing.—These cards are filed alphabetically in a case, so that they may be referred to at any time. To keep the dates of appointments in mind, they are entered on a calendar pad from these cards, inasmuch as the number of cards is usually too small to warrant their being classified according to dates of future interviews chronologically.

Customer's Card.—When a policy is written for a person who has been solicited, this buff card is destroyed and a new "customer's card" is made out similar to that shown in Figure II. The essential information on the buff card is transferred to this white card, and

in addition to this the essential facts concerning the policy written are recorded. This card is then filed, also alphabetically, in a customer's case, where it is preserved always.

"Improbable" Prospects.—The records of persons upon whom the solicitor has been working, for whom no policy has been written and who are apparently hopeless, at least for the time being, are taken out of the buff card case, and are filed in a pigeon-hole, with others of their kind. These are read periodically, every few months, for information of any new facts concerning any persons who are entered on the cards. Death, alone, is necessary to designate a card as "dead," in which case it is destroyed.

NAME	
DATE OF APPLICATION	BUSINESS ADDRESS
NO. OF POLICY	RESIDENCE
WHEN DUE	BUSINESS
PREMIUM	PLACE OF BIRTH
FORM OF POLICY	BENEFICIARY
AGE	REMARKS
DATE OF BIRTH	

Figure II

Whenever the person whose record appears on a buff card—placed in the hopeless file—is found to be in a more receptive mood, the card is again placed in the card case with the cards of others who are being solicited, and work is again begun upon him.

Future Prospects.—Persons who may for some good reason not be approachable for soliciting for three, six months, or even longer, have their cards left in the regular file, with this information recorded on them. Their names may either be entered on a calendar pad on the date on which they are to be seen again, or it may be good policy for this and for general pur-

poses to look through the file of buff cards every month, and so keep track of all these individuals. In any case, all such information is always written on the card under "Remarks," so that it can be referred to when necessary.

The Value of a Record of Policies Written.—The white cards are kept partly in order that the solicitor may always have at hand the list and facts of all the policies he has written—a record which will be found very serviceable and convenient, as for one reason or another a solicitor has many occasions to look up his policies. If he has no such record, he must either go to the books of his company or to the document which his customer holds. But these cards fulfill another function. A solicitor is never satisfied with writing one policy for an individual. He will wish, when a time has passed since his first policy has been written, to solicit him for another. He has then all the facts at hand which he formerly had on his buff card.

If a customer is approached for a second time, a buff card is again made out for him, if a second policy is secured another white card is filled out.

LAW

Following is described by Morris R. Osborne, a method by which the documents of a law office may be kept in easily accessible form.

The Common or Envelope Method.—The ordinary method of filing papers in the legal department of a large corporation is generally that used in most law offices—that of placing all the documents in a case, in a large envelope, writing each step that is taken, and of making a notation of each document on the envelope, and filing the envelope alphabetically under the name of one of the parties. The disadvantages of this method are many. In the first place, the envelope used is rarely printed so that important information can be prominently displayed, and the whole envelope must be searched to discover what disposition has been made of the case. Then, the space on the envelope, even if both sides are used, often proves insufficient to contain

all the steps which are taken, and it is inconvenient to provide another envelope merely for writing purposes. Also, these envelopes are usually filed in a vault, and eventually become torn and mutilated and the writing on them undecipherable.

With this system attention is called to cases by means of a note, made on some calendar, or more often by memory, and in this way it very often happens that action is not taken on the day on which it should be, and damage often results.

In order to obviate these disadvantages, there is here presented a system which is as easily handled as the

NAME AND ADDRESS John H. Ferriss & Co. 299 Wautworth Ave.					312
OTHER PARTIES ADDRESS AND OTHER INFO J. H. Winters, driver - 1963 Clark St.		V. W. Cantoright, 4906 Wessling Ave.		DISTRIBUTION Judgment 9/9 25 Paid in full 9/7/03	
DATE RECEIVED 4/02	REMARKS Machine delivered to factory at Bernards.				
DATE OPENED 4/02	Payment refused on account of alleged delay in delivery. Contract in files				
AMOUNT \$47.52					
STORY 9/4 wrote Company requesting payment. 9/6 letter requesting with. new 9/8 interview set for 9/14. 9/14 W did not settle. wants week to decide. 9/20 wrote threatening suit if payment not made. 10/3 wrote, stating will sue by the 15th 10/16 Suit begun. 10/3 motion to be argued 9/6 sub. Induced Winters and Cantoright. 9/9 judgment -					

Figure I

old envelope method, and which gives much better results. By its use all the information concerning a case is available at a moment's notice without the delay of searching in a vault, and with the ordinary amount of care no necessary action on a case can be overlooked.

Classes of Cases.—The matters which come into the legal department are of various natures, but may generally be divided into two classes—those in which the company itself is plaintiff, or at least aggressor, and

those in which the company is defendant. These may be treated distinct from each other, if desired, but I have found it perfectly suitable to handle them in the same way. Accordingly, as each case is received in the department, a card is made out for it—a yellow card for claims against customers and similar matters and a white one for actions against the company. These cards contain spaces for the names and addresses of the parties to the case, the names of any other persons, such as witnesses, who may be involved. The nature of the claim is to be described in a suitable space and a prominent place is left for an entry as to the ultimate disposition of the case. Thus, by reference to the card, it can be told at a glance whether the case has been settled or not, and, if so, how.

Use of the Card Index.—These cards are numbered consecutively, and when made out are filed alphabetically under the name of the person involved. At the same time that the card is made out, an envelope or folder is taken, bearing the same number as the card, and all papers pertaining to the case are placed in it. These envelopes are filed numerically in a vertical file, from which they are instantly obtainable by reference to the cards, should it be necessary to consult any of the papers or insert new ones.

Filing.—As soon as the case is received, some action is taken, and a notation to this effect is made on the card. The card is then filed alphabetically, a computation made as to the date on which the next step ought to be taken, and a tab placed over that date in the list of numbers at the top of the card. As each step is taken, a note to that effect is made on the card, and the tab pushed forward to the next date when action is necessary. The back of the card is ruled, so that when the space available for entries on the front has been utilized, more information may be entered on the back.

Dead File.—When the case has been brought to some conclusion, a notation to that effect is made and the card removed from the live file and placed in a general case, where it is available should any question arise

in the future, as it often does, concerning the adjustment.

By a rapid glance over the tabs, all the cases which need attention on one day, and for two or three days to come, can be located at once. In order to facilitate location of the cards, it has been found helpful to indicate ordinary claims by a black tab, justice shop cases by a red one, and cases in an upper court by a white one. Another valuable factor in this system is that only the live matters are before one at any time.

NUMERICAL SYSTEM OF FILING

The old style of filing correspondence was by alphabetical arrangement in flat files. These as they became full were stored with their contents. Unless the files were rearranged—which was a rare occurrence—they contained live as well as dead correspondence. For instance, when the file "Sa-So," was removed with its contents from the series, letters from the Smith Manufacturing Co. might be needed daily with no recourse except to either assort them and place them in the new file or refer to the stored file. Then, too, letters pertaining to and even coming directly from the Smith Mfg. Co. might be indexed under other letters and be overlooked when the firm's correspondence is assembled.

The Vertical System.—This system of filing letters, papers, circulars and similar matter is an improvement over flat sheet files, just as the card system is an improvement over books. It consists of a cabinet of drawers in which folders are placed on edge between guide or index cards. In the folders is placed the matter to be filed, there being one folder for each firm or subject.

If the folders are arranged numerically, which is advisable in almost every case, each firm or subject is given a number corresponding to the folder representing it. Guide cards with numbered projections to quickly catch the eye are placed at intervals of 10 or 20 and facilitate quick reference to any folder. In the best system, the cards bearing these numbers are

arranged either alphabetically, geographically or topically as desired by the user.

ADVANTAGES OF THE VERTICAL SYSTEM.

Quick Reference.—Any folder, and therefore all the correspondence, can be secured at once. Only an instant's consultation of the card index is needed and not even this will be necessary after the system has been in use for a short time, for the clerk soon memorizes the numbers. The latest letters are always on top.

Mistakes Avoided.—Numbers cannot be confused. Blurred copies are easily identified. Only transient correspondence—one or two letters from the same source—are arranged alphabetically. In some offices where only a very few letters are ever received from any one firm the entire arrangement is alphabetical.

Greater Capacity.—In the same amount of space double the number of letters can be filed. Old and useless matter is removed and new takes its place. There is no waste space on account of drawers filling irregularly, as one has but to shift excess folders and guides from an over-filled drawer to one with empty space.

Correspondence Not Scattered.—All correspondence from beginning to end is in one folder. Letters signed by different members or employes of a concern are all filed in the folder with the same number. Cards are made out for each so that the correspondence can be located with any of the names as a guide. Postal cards and small pieces are safe in the folders.

Copy Books Unnecessary.—Carbon copies are made, the stenographer noting the number on the letter, putting it on the letter written so it is duplicated on the copy and the incoming and outgoing correspondence are together.

Easy Reference.—By means of cards in the index, letters and papers may be indexed in so many ways that nothing can be lost. Letters of quotation, for instance, may be indexed both by article and by name. In taking up a subject, as an example, "Repairs on Engine-house," one folder can be devoted to this subject, and all the letters, plans, contracts, etc., pertain-

ing to this work can be filed in one folder, but be indexed by name, subject or in a dozen different ways in the card index.

Less Cost.—Capacity for capacity, not only the first cost but the subsequent expense for transfer cases is much less. The index cards may also be used for customers, sales or credit records, and as an index to orders.

BUSINESS ADVICE BY CAPTAINS OF INDUSTRY

The business man of to-day who deals with the larger problems of finance, law, trade, and the many other divisions comprehended under the generic term "business," makes no secret of the methods by which success was won. The successful man in a certain line—in common with the man who has not attained business greatness—is always interested in the sayings and advice of the Captains of Industry of our nation.

Following are given a number of synopses of the rules which were primarily instrumental in bringing those from whom quotation is made to the haven of success in business.

Elbridge G. Keith, President, The Chicago Title and Trust Company, says:

"I take up one thing at a time. When I lay a thing aside it is completed—completed as well as I know how. Doing one thing at a time, keeping at it until finished, and doing well, must bring success. To do things well means that a certain amount of time and thought must be upon them. What will allow the modern business man to put the most time and the best thought on the greatest number of acts each day? A system—a system which will bring them to his attention methodically—a system which will put such facilities at his command that they can be disposed of quickly and intelligently—a system which will put only a fraction of the work upon him (but that fraction the vital point) and carry out the rest accurately and efficiently. Some people perform the tasks that are

assigned them well, but they do not succeed. Why? Simply because they are doing just what they are asked to do—no more. It is the man who does a little more than is assigned to him who gets the position above when it becomes vacant. It is the man who does everything that he can find to do and does all these things well whose climb is constant; and he can only do those few things more than are assigned to him by using systematic methods in his own work."

Edward S. Lacey, President, The Bankers' National Bank, Chicago, says:

"The business world is like an immense plant of machinery where all parts must work in unison. In a plant this result is brought about by the application of mechanical principles and the perfection of mechanical devices. In business, smooth gradation of one operation into another, the turning out of a volume of work with no hitches or errors, must be accomplished through the application of system and systematic devices. There is another vital point of comparison between the mechanical and the business world. The great multitude of inventions did not come until there was a certain concentration of industry, which first established a closer relation between the different processes and then introduced new methods and devices adequately to handle them. In the same way, while the business world was a mass of smaller units, the necessity for system was not so apparent, but as business units increased in size, necessity soon brought about the adoption of systematic principles and methods. A big thing is merely a combination of many little things, but the little things are just as important as they ever were. And to keep watch over and carry out the little details requires the organization of a perfect system."

Thomas P. Phillips, President, The Federal Trust and Savings Bank, Chicago, says:

"There is no business success without system. From my own experience I should say there is no prospering business to-day whose success is not in some degree based upon systematic methods. Now, modern busi-

ness is so arranging itself that the business man occupies as distinctive and unified a field—a field requiring as much training and technical knowledge—as the lawyer or the engineer. A technical knowledge of and training in systematic methods and organization is the prime requisite in the education of the modern business man and these two phrases mean a great deal. They stand for low costs and decreased expenses, for accuracy and promptness, for time and labor saving, for efficiency and understanding. In the modern game of business two of the most important factors are initiative and will—which means the power to inaugurate and build an organization, and executive ability—which means the capacity for conducting a system. It is the man who uses system in his business, and therefore does business with least cost and with least effort, who shows the profit at the end of the year. And it is the man who uses system in his business, and therefore knows the details, who is able to develop his business to its greatest possibilities.”

Edwin A. Potter, President, The American Trust and Savings Bank, Chicago, says:

“A thorough knowledge of the smallest details of one’s business, well-directed effort in work, and the power to organize a business—these are the three foundation stones of success. In this day of great industries a thorough knowledge of the smallest details of a business could not be secured in the old way of knowing simply through the process of doing. There are too many details. The business man to-day must have facilities by which knowledge of them will come to him automatically. Well-directed effort means more than merely industry and hard work. It means that the worker must know how and where to apply his labor to the attainment of the best and biggest results. And the power of organizing and conducting a big business—executive ability—means the power to make all the small processes of the business dovetail into each other and work smoothly and efficiently. Through all these three essential factors of business success runs the thread of system. Knowledge of the details of a busi-

ness can come only from a system which will bring them to the attention of the business man regularly. The hardest work can bring the best results only if efforts are intelligently and systematically applied. The organization of a business can only come through the systematization of the smaller processes."

Henry Siegel, the founder of Siegel Cooper & Co. of New York, president of Siegel Cooper & Co. of Chicago, of the Simpson-Crawford Co. and the Fourteenth Street Store of New York, and the new Siegel, Cooper & Co. of Boston, says:

"System and organization are the controlling elements of any large commercial or industrial enterprise—the two reins by which the business bodies are guided. In nearly every sphere of activity are found the elements of skill, enthusiasm and enterprise—qualities that make for success only when they are applied in the right direction. Skill must be directed along proper channels; enthusiasm must be directed to specific ends; enterprise must be organized to meet certain conditions and to attain designated results. And in this co-operation—this working together for the benefit of all concerned—system reaches its highest function."

Henry C. Lytton, President of "The Hub," the largest furnishing store in Chicago, says:

"To what extent any business or other enterprise is successful is dependent primarily upon personality, the central figure in any line of activity. To what extent a personality is successful is dependent upon that personality's application of those policies and methods that serve its ends. A personality is responsible for the success or failure of a business firm largely to the extent by which he is enabled to organize and to control its forces—to install and apply the personal influence in his systems.

"I have never known of a great business success without a personality. I have never known of a great personality in business without a system."

Leon Mandel, President of Mandel Brothers, Chicago, says:

"There is probably no other single word in the language that better describes success than 'system.' The larger the business, the better must be the system by which it is conducted; yet whatever its size, system is the essential factor.

"Modern titanic business institutions have been made possible by commercial possibilities linked with system. System enables the head of a concern to hold the reins of management of any business; it keeps him in touch with his assistants, his sales, his stock, his customers. I have been methodical and systematic, that I might obtain the best results by the surest means and in the shortest time."

Isaac Gimbel, President of Gimbel Brothers, retailers of Philadelphia and Milwaukee, says:

"I install a system in every branch of my business—and follow up that system.

"The tendency of modern retailing is to simplify every detail of the work. This means neither too much recording—red tape—nor too little recording—carelessness; it means the happy medium that gets the greatest returns from the least outlay of time or money—system.

"System is a necessary servant, but a bad master. System must be operated—it does not operate itself. System economizes time, labor, expense; and the best system is that which effects the greatest economy of all three."

P. A. Conne, Secretary and Treasurer of Saks & Company of New York, London, Paris and Berlin, says:

"System means to a business what good tools mean to a craftsman. A merchant can do good work no more than a craftsman does good work unless he has the mechanical means. And the mechanical means of the business man is system.

"System means consecutive attention to all the essential and the elimination of all the unessential

details. It is the means whereby the greatest amount of work may be done at the least expense of time, energy and money.

"System means knowledge versus guesswork, facts versus fiction. And system always means economy in the end, or it is no longer system."

Edward B. Butler, President of Butler Brothers, of New York, Chicago and St. Louis, says:

"The captain of industry of to-day learned in his youth that a mental plan was needed for any undertaking. Out of this planning grew his system; out of this system grew his success. I have never known a successful merchant who was not systematic. A great mercantile business is possible only when the minutest details are given their full measure of importance.

"The captain of industry must hold the helm; but he must depend upon his ship—system—and upon those who operate it."

Graeme Stewart, of the Wm. M. Hoyt Co., Chicago, says:

"To attain success in modern commercial life requires the perfection of a system for conducting business at the least possible expense and the power to put all the energy at one's command into this system.

"The process by which the energies of a business enterprise are directed toward specific ends—the system by which its powers and plans are utilized—are the fundamental factors in business building.

"To be successful a man must have his thoughts on his work."

Adolphus C. Bartlett, President of Hibbard, Spencer, Bartlett & Company of Chicago, says:

"After forty years of experience I am convinced that success in business depends not only upon natural ability, but upon a thorough preparation and training in improved systems and exact methods. This preparation is specially valuable in these later years when information about the organizations and methods of busi-

ness houses has become more general and competition more keen.

"The difference between a good and a poor preparation in business method is just the difference between system and carelessness, between success and failure."

Harry G. Selfridge says:

"More important than any one thing in the conduct of a retail business is organization. No matter how forceful the personality which inspires an establishment, how superior its goods or how efficient the individuals in its employ, organization is necessary to make them most effective."

L. C. Smith, of the Smith-Premier Typewriter Co., says:

"Success in the modern industrial world is largely a matter of organization; organization is a matter of system. All business undertakings must be operated under a thorough system to be successful. Each part must work in harmony, as a perfect system admits of no friction. Bring all elements into accord, else the desired ends will not be attained. And the means of bringing these elements into accord is system."

John H. Converse, of the firm of Burnham & Williams, proprietors of the Baldwin Locomotive Works, says:

"Success in the modern commercial world I attribute to knowledge of business; work; system.

"A successful man must know his business. He must apply this knowledge—he must work, and he must work to the best advantage. And to work to best advantage he must work with system.

"Much energy is lost because it is not applied systematically."

Andrew Carnegie, in "The Empire of Business," says:

"The secret of success is a simple matter of honest work, ability and concentration. There is no question about there being room at the top for exceptional men in any profession. Your problem is, how to get there.

The answer is simple: conduct your business with just a little more ability than the average man in your line. If you are only above the average man your success is secured, and the degree of success is in ratio to the greater degree of ability and attention which you give above the average."

Russell Sage, as quoted by the New York World, says:

"To the young man of to-day who wishes to get on, I would say that the common rules of success are simple ones. Be faithful to whatever trust is in your keeping, be industrious and frugal, and you cannot fail."

George W. Ogilvie says to the young man starting out:

"If you need the money, take any kind of a job you can get and do your very best. You may be successful at first; at any rate, it will take your employer a week to find it out if you are no good."

John Wanamaker's advice to young men is:

"Do not hesitate to branch out; learn; observe; be honest and upright, and you will not fall short of success."

Similar advice to the foregoing has been given by others prominently successful in the history of our country. Philip D. Armour, Marshall Field, John D. Rockefeller and Alexander Revell emphasize one or two points more, perhaps, than others, but all successful men have the same formula: "Well directed work wins."

BOOK V

BUSINESS TABLES

DUTIES ON IMPORTS

A Table of Leading Articles Imported, Giving Rate at Entry by the Tariff Act of 1897.

Note.—N. e. s. indicates "when not elsewhere specified"; ad val. indicates ad valorem duty.

Articles—	Tariff Rate—
Alcohol, amylic, or fusel oil....	¼ ct. per lb.
Animals for breeding purposes..	Free
Barley, bushel of 48 lb.....	30 ct. per bu.
Beads	35% ad val.
Beef, mutton, and pork.....	2 ct. per lb.
Beer, ale, not in bottles.....	20 ct. per gal.
Beer, porter, and ale, in bottles..	40 ct. per gal.
Bindings, cotton.....	45% ad val.
Bindings, flax.....	45% ad val.
Bindings, wool.....	50 ct. per lb. and 60% ad val.
Blankets	22 ct. per lb. and 30% ad val.
Blankets, value 40 ct. to 50 ct....	33 ct. per lb. and 35% ad val. (a)
Bonnets, silk.....	60% ad val.
Books, charts, maps.....	25% ad val.
Books, over 20 yr. old, for public libraries	Free
Bronze, manufactures of.....	45% ad val.
Brushes	40% ad val.
Butter, and substitutes.....	6 ct. per lb.
Buttons, sleeve and collar, gilt..	50% ad val.
Canvas for sails.....	45% ad val.
Caps, fur and leather.....	35% ad val.
Carpets, treble ingrain.....	22 ct. per sq. yd. and 40% ad val.
Carpets, two-ply.....	18 ct. per sq. yd. and 40% ad val.

Carpets, tapestry Brussels.....	28 ct. per sq. yd. and 40% ad val.
Carpets, Wilton, Axminster, velvet	60 ct. per sq. yd. and 40% ad val.
Cattle (over 1 yr. old).....	27½% ad val.
Cheese, all kinds.....	6 ct. per lb.
Cigars and cigarettes.....	\$4.50 per lb. and 25% ad val.
Clocks, n. e. s.....	40% ad val.
Clothing, ready-made, cotton, n. e. s.....	50% ad val.
Clothing, ready-made, linen, silk, and woolen.....	60% ad val. (k)
Coal, anthracite.....	Free
Coal, bituminous.....	67 ct. per ton
Coffee	Free
Confectionery, all sugar.....	50% ad val. (if more than 15 ct. per lb.)
Copper, manufactures of.....	45% ad val.
Cotton gloves.....	50% ad val.
Cotton handkerchiefs, hemmed..	45% ad val.
Cotton handkerchiefs, hem- stitched	55% ad val.
Cotton hosiery.....	50 ct. to \$2 per doz. pairs and 15% ad val.
Cotton shirts and drawers.....	60 ct. to \$2.25 per doz. and 15 to 50% ad val.
Cotton plushes, unbleached.....	9 ct. per sq. yd. and 25% ad val.
Cotton webbing.....	45% ad val.
Cotton curtains.....	50% ad val.
Cutlery, more than \$3 per doz..	20 ct. per piece and 40% ad val.
Cutlery, razors, over \$3 per doz.	\$1.75 per doz. and 20% ad val.
Cutlery, table knives.....	16 ct. each and 15% ad val.
Cutlery, table knives, over \$4 per doz.....	45% ad val.
Diamonds (uncut, free), cut and set	60% ad val.

Diamonds, cut, but not set.....	10% ad val.
Drugs (crude, free), not crude..	¼ ct. per lb. and 10% ad val.
Dyewoods, crude.....	Free
Dyewoods, extracts of.....	⅞ ct. per lb.
Earthenware, common.....	25% ad val.
Earthenware, porcelain, plain...	55% ad val.
Earthenware, porcelain, etc., decorated	60% ad val.
Eggs	5 ct. per doz.
Engravings	25% ad val.
Extracts, meat.....	35 ct. per lb.
Fertilizers, guanos, manures....	Free
Firearms	(b)
Fish, American fisheries.....	Free
Fish, smoked, dried.....	¾ ct. per lb.
Flannels.....	22 ct. per lb. and 30% ad val.
Flannels, value 40 ct. to 50 ct..	33 ct. per lb. and 35% ad val.
Flax, manufactures of, n. e. s....	45% ad val.
Flowers, artificial.....	50% ad val.
Fruits, preserved in their own juice.....	1 ct. per lb. and 35% ad val.
Fruits, apples.....	25 ct. per bu.
Fruits, oranges, lemons, n. e. s..	1 ct. per lb.
Fur, manufactures of.....	35% ad val.
Furniture, wood.....	35% ad val.
Glassware, plain and cut.....	60% ad val.
Glass, polished plate, not over 16 in. × 24 in.....	8 ct. per sq. ft.
Glass, silvered, not over 16 in. × 24 in.....	11 ct. per sq. ft.
Glass bottles, over 1 pt.....	1 ct. per lb.
Gloves, men's, ladies', children's.	*
Glucose	1½ ct. per lb.
Glue, value not over 7ct. per lb.	2½ ct. per lb. (g)
Gold, manufactures of, not jew- elry	45% ad val.
Hair of hogs, curled for mat- tresses	10% ad val.

Hair manufactures, n. e. s.	35% ad val.
Hair, human, unmanufactured.	20%; not drawn, free
Hams and bacon.	5 ct. per lb.
Hay	\$4 per ton
Hemp cordage.	2 ct. per lb.
Hides, raw, fried, salted, pickled.	15% ad val.
Honey	20 ct. per gal.
Hoops, iron or steel, baling.	½ ct. per lb.
Hops.	12 ct. per lb.
Horn, manufactures of.	30% ad val.
Horses, mules.	\$30 per head (h)
India rubber, manufactures of.	30% ad val.
India rubber, vulcanized.	35% ad val.
Instruments, metal.	45% ad val.
Iron, manufactures of, n. e. s.	45% ad val.
Iron screws, ½ in. or less in length	12 ct. per lb.
Iron, tinned plates.	1½ ct. per lb.
Ivory, manufactures of, n. e. s.	35% ad val.
Jewelry	60% ad val.
Knit goods, wool, value not over 30 ct. per lb.	44 ct. per lb. and 50% ad val.
Knit goods, woolen apparel, 30 ct. to 40 ct. per lb.	44 ct. per lb. and 50% ad val.
Knit goods, woolen apparel, over 40 ct. per lb.	44 ct. per lb. and 50% ad val. (c)
Knit goods, silk.	60% ad val.
Lard	2 ct. per lb.
Lead, pigs, bars.	2½ ct. per lb.
Lead, type metals.	1½ ct. per lb.
Leather manufactures, n. e. s.	35% ad val.
Linen manufactures, n. e. s.	45% ad val.
Linen, wearing apparel.	60% ad val.
Macaroni	1½ ct. per lb.
Malt, barley.	45 ct. bu.
Matches, friction, boxed.	8 ct. per gross
Matting, cocoa, and rattan.	6 ct. per sq. yd.
Meerschaum pipes.	60% ad val.

Molasses, n. e. s.....	40° to 50°, 3 ct. per gal. (i)
Muffs, fur.....	35% ad val.
Musical instruments.....	45% ad val.
Nails, cut.....	6-10 ct. per lb.
Nails, horseshoe.....	2¼ ct. per lb.
Newspapers, periodicals.....	Free
Oilcloth, value over 25 ct.....	8 ct. to 20 ct. per sq. yd. (j)
Oil, olive.....	50 ct. per gal. in bottles, etc.
Oil, olive, n. e. s.....	40 ct. per gal.
Oil, whale and seal, foreign, n. e. s.....	8 ct. per gal.
Onions	40 ct. per bu.
Opium, liquid preparations.....	40% ad val.
Opium, crude and unadulterated.....	\$1 per lb.
Paintings and marble statuary..	20% ad val.
Paper manufactures, n. e. s....	35% ad val.
Paper stock, crude.....	Free
Pepper, cayenne, unground.....	2½ ct. per lb.
Perfumery, alcoholic.....	60 ct. per lb. and 45% ad val.
Photograph albums.....	35% ad val.
Photograph slides.....	25% ad val.
Pickles	40% ad val.
Pins, metallic.....	35% ad val.
Pipes of clay, common, 40 ct. per gross	15 ct. per gross
Poultry, dressed.....	5 ct. per lb.
Potatoes	25 ct. per bu.
Pulp wood, for paper makers... 1-12 ct. per lb. mechanically ground (l)	
Quicksilver	7 ct. per lb.
Quinine, sulphate, and salts....	Free
Railroad ties, cedar.....	20% ad val.
Rugs, Oriental.....	10 ct. per sq. ft. and 40% ad val.
Salmon, dried or smoked.....	¾ ct. per lb.
Salt	12 ct. per 100 lb., packages; 8 ct. per 100 lb., bulk

Sauces, n. e. s.....	40% ad val.
Sausages, bologna.....	Free
Sausages, all other.....	25% ad val.
Sealskin sacques.....	35% ad val.
Silk, raw.....	Free
Silk, spun in skeins.....	35% ad val. (d)
Silk laces, wearing apparel.....	60% ad val.
Skins, uncured, raw.....	Free
Skins, tanned and dressed.....	20% ad val.
Slates, manufactures of, n. e. s..	20% ad val.
Smokers' articles, except clay pipes	60% ad val.
Soap, castile.....	1¼ ct. per lb.
Soap, toilet, perfumed.....	15 ct. per lb.
Spirits, except bay rum.....	\$2.25 prf. gal.
Straw manufactures, n. e. s....	30% ad val.
Sugars, not above 16 Dutch standard	95-100 ct. per lb. (m)
Sugars, above 16 Dutch standard	1 95-100 ct. per lb.
Tea	Free
Tin, ore or metal.....	Free
Tin plates.....	1½ ct. per lb.
Tobacco, cigar wrappers, not stemmed	\$1.85 per lb.
Tobacco, if stemmed.....	\$2.50 per lb.
Tobacco, all other leaf, stemmed	50 ct. per lb.
Tobacco, unmanufactured, not stemmed	35 ct. per lb.
Umbrellas, silk or alpaca.....	50% ad val.
Vegetables, natural, n. e. s.....	25% ad val.
Vegetables, prepared or pre- served	40% ad val.
Velvets, silk, 75% or more silk..	\$1.50 per lb. and 15% ad val.
Watches and parts of.....	40% ad val.
Wheat, bushel of 60 lb.....	25 ct. per bu.
Willow for basketmakers.....	20% ad val.
Willow manufactures, n. e. s....	40% ad val.
Wines, champagne, in ½-pt. bot- tles or less.....	\$2 per doz.
Wines, champagne, in bottles, ½ pt. to 1 pt.....	\$4 per doz.

Wines, champagne, in bottles, 1 pt. to 1 qt.....	\$8 per doz.
Wines, still, in casks containing more than 14% absolute alco- hol	50 ct. per gal.
Woods, cabinet, sawed.....	\$1 to \$2 per M. ft.
Wool, first class.....	11 ct. per lb.
Wool, second class.....	12 ct. per lb.
Wool, third class, n. e. s., above 13 ct. per lb.....	7 ct. per lb. (e)
Wool or worsted yarns, value not over 30 ct. per lb.....	27½ ct. per lb. and 40% ad val.
Wool or worsted yarns, value 30 ct. to 40 ct., per lb.....	38½ ct. per lb. and 40% ad val.
Wool or worsted yarns, value over 40 ct., per lb.....	38½ ct. per lb. and 40% ad val.
Woollen or worsted clothing....	44 ct. per lb. and 60% ad val.

*The Dingley Tariff increases rates on women's and children's gloves uniformly 75c. per dozen pairs; on men's gloves the rates are the same as the Wilson rates. (a) Valued at more than 50c. per lb., 33c. per lb. and 40 per cent ad val. (b) Specific duties ranging from \$1.50 to \$6 on each article and 35 per cent ad val. (c) On goods above 40c. and not above 70c. per lb.; duty on goods above 70c. per lb., 44c. per lb. and 55 per cent ad val. (d) Value \$1 per lb., 20c. per lb. and 15 per cent ad val., with increasing duty of 10c. per lb. for each 50c. additional value up to \$2.50; all over \$2.50 per lb., 60c. per lb. and 15 per cent ad val. (e) Wool valued at 12c. per lb. or less, 4c. per lb.; above 12c. duty is 7c. per lb. (f) Two prices only in Dingley bill, 30c. and less, and above 30c. (g) If not over 10c. per lb. (h) If valued at \$150; if more, 25 per cent ad val. (i) Above 56°, 6c. per gal. (j) And 15 to 20 per cent ad val. (k) On woollen an additional duty of 44c. per lb. (l) Chemical wood pulp, 1-6c per lb. (m) When not above 75°, but for every additional degree by polariscopic

test, 35-1,000c. per lb. additional, and fractions of a degree in proportion.

Articles of merchandise entering the United States from Hawaii and Porto Rico and entering those possessions from the United States are exempt from duty.

The act of Congress approved March 2, 1902, provides that the customs duties on articles entering the Philippines from the United States shall be the same as on those entering from foreign countries. On articles entering the United States from the Philippines the full tariff rates shall be collected except that a 25 per cent reduction shall be granted on articles produced and grown in the Philippines.

TABLES OF WEIGHT, MEASURE, ETC.

TROY MEASURE.

For weighing gold, silver and precious stones.

24 grains make.....	1 pennyweight.
20 pennyweights make.....	1 ounce.
12 ounces make.....	1 pound.

The standard Troy pound is the weight of 22.79437 cubic inches of distilled water, and is less than the pound Avoirdupois.

The Troy pound is the one adopted by the mint at Philadelphia and elsewhere, and may be regarded as the standard of weight. The following tables show the formula of Troy weight, and the difference between Troy and Avoirdupois weights:

The Troy pound contains—

5670 grains equal to.....	240 pwt. equal to 12 ounces =
	1 lb. Troy.
480 grains equal to.....	20 pwt. equal to 1 ounce.
24 grains equal to.....	1 pwt.

The difference is shown as follows:

7000 Troy grains make.....	1 pound Avoirdupois.
437½ Troy grains make.....	1 ounce Avoirdupois.
175 Troy ounces make.....	192 ounces Avoirdupois.
175 Troy pounds make.....	144 pounds Avoirdupois.
1 Troy pound makes.....	.822857 pounds, Avoirdupois.
1 Avoirdupois pound make.....	1.215278 pounds, Troy.

One pound Troy is equal to 1 pint Wine Measure.

WINE OR LIQUID MEASURE.

Wine, spirits, cider, vinegar, oil, honey, etc., are measured and sold by this measure.

The standard unit for measurement of liquids adopted by the U. S. custom house is the wine gallon, 231 cubic inches, and contains 8.388822 Avoirdupois pounds, or 58373. Troy grains of distilled water.

All liquors except milk, beer and ale are bought and sold by this measurement.

4 gills make.....	1 pint.
2 pints make.....	1 quart.
4 quarts make.....	1 gallon.
31½ gallons make.....	1 barrel.
42 gallons make.....	1 tierce
100 gallons make.....	1 anker.
18 gallons make.....	1 runlet.
63 gallons make.....	1 hogshead.
2 hogsheads make.....	1 pipe or butt.
2 pipes or 4 hogsheads make.....	1 tun.

One pint wine measure is equal to one pound Troy weight.

Wine, beer and dry measures, and all measures of volume, differ from the cubic measure only in the unit which is used as a standard.

The English Imperial Wine gallon is equal to about 1.2 times the wine gallon of the United States. The wine gallon of the United States contains 231 cubic inches.

One barrel of wine or brandy in Great Brit-

ain or United States equals.....	31½ gallons.
One-half barrel in Pennsylvania equals....	16 gallons.
One double barrel in Pennsylvania equals..	64 gallons.
A puncheon in Pennsylvania equals.....	84 gallons.
A tierce in Pennsylvania equals.....	42 gallons.

The usual custom in the United States to reduce liquid measures to English or British ones of same denominations is to divide by 1.2, or to be exact, by 1.20032; or to change British to United States measures multiply by 1.2.

MISCELLANEOUS WEIGHTS AND MEASURES.

A cylinder one foot in diameter and one foot high contains—

1357.1712	cubic inches.
.7854	cubic foot.
.02909	cubic yard.
188.0064	United States liquid gills.
47.0016	United States liquid pints.
23.508	United States liquid quarts.
5.8752	United States liquid gallons.
40.3916	United States dry pints.
20.1958	United States dry quarts.
2.5245	United States dry pecks.
.63112	United States dry bushels.

A load of timber contains—

50 cubic feet of square timber,	
100 linear feet, 6x12-inch timber,	
200 linear feet, 6x6-inch timber,	
150 linear feet, 4-in. planking 12-in. wide,	
200 linear feet, 3-in. planking 12-in. wide,	
300 linear feet, 2-in. planking 12-in. wide,	
400 linear feet, 1½-in. planking 12-in. wide,	
600 linear feet, 1-in. planking 12-in. wide,	
20 struck bushels equal.....	25 cubic feet.
A struck bushel equals.....	1.24445 cubic feet.
A cubic foot equals.....	.80356 of a struck bushel.
A dry flour barrel equals....	3 struck bush. or 3.75 cu. ft.

The dry flour barrel is not a legal measure in the United States. The only legal barrel of flour contains 196 pounds.

1 ton of chestnut lumber equals.....	59 cubic feet.
1 ton of ebony lumber equals.....	30 cubic feet.
1 ton of lime equals.....	56 cubic feet.
1 ton of mahogany lumber equals.....	34 cubic feet.
1 ton of maple lumber equals.....	48 cubic feet.
1 ton of poplar lumber equals.....	68 cubic feet.
1 ton of pine lumber equals.....	55 cubic feet.
1 ton of sycamore lumber equals.....	59 cubic feet.
1 ton of walnut lumber equals.....	53 cubic feet.
1 ton of yellow pine lumber equals.....	65 cubic feet.
1 stone is about.....	14 pounds.

1 stone of wool is.....	24 pounds.
1 stone of butcher's meat is.....	8 pounds.
1 cubic foot of ordinary anthracite coal is about	55 pounds.
1 cubic foot of ordinary bituminous coal is about	50 pounds.
1 cubic foot of ordinary Cumberland coal is about	53 pounds.
1 cubic foot of ordinary cannel coal is about	50 pounds.
1 cubic foot of ordinary charcoal (hard wood) is about	18½ pounds.
1 cubic foot of ordinary charcoal (pine wood) is about	18 pounds.
100 cubic feet of stone weighs about.....	13000 pounds.
100 cubic feet of stone is reckoned.....	1 cord of stone.
1 cord Virginian pine is about.....	2700 pounds.
1 cord southern pine is about.....	3300 pounds.
34 cubic feet mahogany weigh.....	1 ton.
39 cubic feet oak or ash weigh.....	1 ton.
51 cubic feet beech weigh.....	1 ton.
60 cubic feet elm weigh.....	1 ton.
65 cubic feet fir weigh.....	1 ton.
1 ton of coal is 28 bushels.....	43.56 cubic feet.
1 ton of ice is.....	43 cubic feet.
1 ton of freight is.....	40 cubic feet.
1 ton of round timber is.....	52.92 cubic feet.
1 ton of square timber is.....	50 cubic feet.
1 ton of shipping timber is.....	42 cubic feet.
1 cubic foot of water is.....	62.3 pounds.
1 cubic foot of plaster paris is.....	73.5 pounds.
1 cubic foot of mortar is.....	98 pounds.
1 cubic foot of brickwork is.....	90 to 120 pounds.
1 cubic foot of sand solid is.....	112½ pounds.
1 cubic yard of sand is about.....	3037 pounds.
1 cubic yard of common soil is about....	3429 pounds.
1 cubic foot of sand loose is.....	95 pounds.
1 cubic foot of earth loose is.....	93¾ pounds.
1 cubic foot of fire brick is.....	137 pounds.
1 cubic foot of mason work is.....	116 to 144 pounds.
1 cubic foot of sand stone is.....	148 pounds.
1 cubic foot of slate is.....	178 pounds.
1 cubic foot of gravel is.....	109 pounds.

1 cubic foot of cement is.....	125 pounds.
1 cubic foot of mud is.....	127 pounds.
1 cubic foot of common clay is.....	137 pounds.
1 cubic foot of clay and stone is.....	160 pounds.
1 cubic foot of glass is.....	165 pounds.
1 cubic foot of granite or marble is.....	170 to 180 pounds.
1 cubic foot of limestone is.....	172 pounds.
1 square of lead is.....	7 to 10 pounds.
1 butt of sherry contains.....	108 gallons.
1 pipe of port contains.....	115 gallons.
1 pipe of teneriffe contains.....	100 gallons.
1 butt of malaga contains.....	105 gallons.
1 puncheon of Scotch whisky contains.....	.....
.....	110 to 130 gallons.
1 puncheon of brandy contains.....	110 to 120 gallons.
1 puncheon of rum contains.....	100 to 110 gallons.
1 hogshead of brandy contains.....	55 to 60 gallons.
1 pipe of Maderia contains.....	92 gallons.
1 hogshead of claret contains.....	46 gallons.

A hogshead is one-half, a quarter-cask is one-fourth, and an octavo is one-eighth of a pipe, but or puncheon.

CLOTH MEASURE.

This measure was formerly used in buying and selling cloth, ribbons, etc. The standard yard and fractional parts thereof are now in general use in this country.

2¼ inches make.....	1 nail.
4 nails (9 inches) make.....	1 quarter.
4 quarters make.....	1 yard.
3 quarters, or 27 inches, make.....	1 Ell Flemish.
5 quarters, or 45 inches, make.....	1 Ell English.
6 quarters, or 34 inches, make.....	1 Ell French.
27½ inches make.....	1 Ell Scotch.

FLUID MEASURE.

60 minims make.....	1 drachm.
8 drachms make.....	1 ounce.
16 ounces make.....	1 pint.
8 pints make.....	1 gallon.

ADVOIRDUPOIS MEASURE.

The standard Avoirdupois pound is of the weight 27.7015 cubic inches of distilled water weighed in air 39.83°, the barometer at thirty inches; one cubic inch of such water weighs 252.6937 grains, and one cubic foot weighs very nearly 1000 ounces.

All coarse articles of merchandise, such as hay, grain, chandler's ware, and all metals except gold and silver are weighed by this measure.

16 drams make.....	1 ounce.
16 ounces make.....	1 pound.
28 pounds make.....	1 quarter.
100 pounds make.....	1 cwt.
20 hundred weight.....	1 ton net.
112 pounds make.....	1 cwt. gross.
2240 pounds make.....	1 ton gross.
56 pounds make.....	1 firkin.
100 pounds fish.....	1 quintal.
196 pounds make.....	1 bbl. flour.
200 pounds make.....	1 bbl. pork or beef.
14 pounds iron or lead.....	1 stone.
2½ stone make.....	1 bushel.
8 pigs make.....	1 bushel.
62 pounds fine salt.....	1 bushel.
75 pounds common salt.....	1 fother.
85 pounds coarse salt.....	1 pig.
240 pounds =	1 cask lime.
300 pounds =	1 cask cement.
100 pounds make	1 cask of raisins.
1 ounce Avoirdupois equals	18 pwt. 5½ grs. Troy, or 437½ grains.
1 pound Avoirdupois equals	14 ounces 11 pwts. 16 grs. Troy, or 7000 grains.

CIRCULAR MEASURE.

Used in measuring latitude and longitude.

60 seconds make.....	1 minute.
60 minutes make.....	1 degree.
30 degrees make.....	1 sign.
360 degrees make.....	1 circle.

CUBIC OR SOLID MEASURE.

Cubic measure is used for measuring stone, timber, earth, capacity of rooms, ships, and such other things as have length, breadth and thickness.

1728 cubic inches make.....	1 cubic foot.
27 cubic feet make.....	1 cubic yard.
40 cubic feet of round timber.....	1 ton.
50 cubic feet of hewn timber.....	1 ton.
42 solid feet make.....	1 ton of shipping.
8 cord feet or.....	1 cord wood.
128 cubic feet.....	1 cord wood.
24¼ cubic feet of stone make.....	1 perch.

A cord of wood is a pile 4 feet high and 8 feet long.

1 cubic foot makes.....four-fifths of a bushel.

64 cubic inches (2x4x8) make....1 brick.

16 cubic feet (2x2x4) make.....1 cord foot.

128 cubic feet (4x4x8) make.....1 cord wood.

The weight of anthracite coal per cubic foot varies with the different qualities. Lackawanna coal weighs 48.89 pounds per cubic foot; Lehigh, 55.32 pounds. There are 45.8 cubic feet in a ton of Lackawanna, and 40.5 cubic feet in a ton of Lehigh.

1 ton of 6-inch granite paving will cover 1 superficial yard.

1 ton of 7-inch granite paving will cover 3½ superficial yards.

1 ton of 8-inch granite paving will cover 3 superficial yards.

1 ton of 9-inch granite paving will cover 2½ superficial yards.

1 ton of pebble paving will cover 4 to 4½ superficial yards.

1 ton of rag stone paving will cover 5 to 5½ superficial yards.

SURVEYOR'S SQUARE MEASURE.

625 square links make.....1 pole.

16 poles make.....1 square chain.

10 square chains make.....1 acre.

640 acres make.....1 square mile.

36 square miles (6 miles square) make...1 township.

DRY MEASURE.

Used to measure all dry articles, such as grain, coal, salt, fruit, etc.

2 pints make.....	1 quart—67.2 cubic inches.
4 quarts make.....	1 gallon—268.8 cubic inches.
2 gallons make.....	1 peck—537.6 cubic inches.
4 pecks make.....	1 bushel—2150.4 cubic inches.
36 bushels make.....	1 chaldron of coal—57.25 cubic ft.
4 bushels in England make.	1 coom.
2 cooms in England make..	1 quarter.
5 quarters in England make	1 wey.
2 weys in England make...	1 last.

The standard bushel of the United States is the Winchester bushel of England. It is a circular measure 18½ inches in diameter and 8 inches deep, and contains nearly 2150.42 cubic inches.

It contains 77.627413 Avoirdupois pounds of distilled water at its maximum density.

A gallon dry measure contains 268.8 cubic inches.

In purchasing anthracite coal 20 bushels are generally called a ton.

SHOEMAKER'S MEASURE.

Number 1 is 4.125 inches in length, and every succeeding number is .333 of an inch. There are 28 numbers or divisions in two series of numbers, to-wit: 1 to 13 and 1 to 15.

SURVEYOR'S LONG MEASURE.

Used by civil engineers, surveyors, etc.

The surveyors or Gunter's chain is generally used in surveying land. It is 66 feet or 4 poles in length and is divided into 100 links.

Engineers commonly use a chain or measuring tape 100 feet long.

7 92-100 inches make.....	1 link.
25 links make.....	1 rod.
4 rods or 100 links make.....	1 chain.
60 chains make.....	1 mile.

MISCELLANEOUS MEASURES.

3 inches make.....	1 palm.
4 inches make.....	1 hand.
9 inches make.....	1 span.
12 inches make.....	1 foot.
3.2809 inches make.....	1 metre.
18 inches make.....	1 cubit.
28 inches make nearly.....	1 sacred cubit.
28 inches make.....	1 pace.
3 feet make.....	1 yard.
6 feet make.....	1 fathom.
120 fathoms make.....	1 cable.
3 feet make.....	1 pace.
A hair's breadth is .02083 or 1-48 part of an inch.	
1 yard is .000568 of a mile.	
1 inch is .0000158 of a mile.	

LAND MEASURE OR SQUARE MEASURE.

Used in measuring surfaces.

144 sq. inches make.....	1 sq. foot.
9 sq. feet make.....	1 sq. yard.
30¼ sq. yards, 272¼ sq. inches, make.....	1 sq. rod or perch.
40 sq. rods or perches make.....	1 sq. rood.
4 sq. roods or 10 sq. chains make.....	1 acre.
640 acres make.....	1 sq. mile or section.
220x198 feet sq. or 43,560 sq. feet make.....	1 acre.
36 sq. miles (6 miles sq.) make.....	1 township.

LINEAR MEASURE OR MEASURES OF LENGTH.

Used in measuring distances where length only is considered.

3 barleycorns or 12 lines make.....	1 in.
12 inches make.....	1 foot.
3 feet make.....	1 yard.
5½ yards, or 16½ feet, make.....	1 rod.
40 rods make.....	1 furlong.
8 furlongs make.....	1 mile.
3 miles make.....	1 league.
69.77 statute, or 60 geographic miles 1 deg. on the equator.	
360 degrees the circumference of the earth.	

The United States measure is a brass rod, which, at the temperature of 32 degrees, is a standard yard—3 feet or 36 inches.

APOTHECARIES' MEASURE.

20 grains make.....	1 scruple.
3 scruples make.....	1 drachm.
8 drachms make.....	1 ounce.
12 ounces make.....	1 pound.

ARCHITECTS' OR BUILDERS' MEASURE.

This measure is used in measuring surface painting, plastering brick work, shingles and other roofing, etc., or any surface having length or breadth.

144 square inches make.....	1 square foot.
9 square feet (3x3) make.....	1 square yard.
10 feet square (10x10) make.....	(100 ft.) 1 square.

ALE OR BEER MEASURE.

Milk, cider, vinegar and other cheap articles are sold in small quantities by this measure. Milk in many places is also sold by wine measure.

2 pints make.....	1 quart.
4 quarts make.....	1 gallon.
9 gallons make.....	1 firkin.
2 firkins or 18 gallons make.....	1 kilderkin.
2 kilderkins or 36 gallons make.....	1 barrel.
1½ barrels or 54 gallons make.....	1 hogshead.
1⅓ hogsheads or 72 gallons make.....	1 puncheon.
1½ puncheons or 108 gallons make.....	1 butt.

UNITY.

12 units make.....	1 dozen.
20 units make.....	1 score.
12 dozen make.....	1 gross.
12 gross make.....	1 great gross

PAPER.

24 sheets make.....	1 quire.
10½ quires make.....	1 token.
20 quires make.....	1 ream.
2 reams make.....	1 bundle.
5 bundles make.....	1 bale.

COPYING.

75 words make.....	1 folio sheet of Common Law.
90 words make.....	1 folio sheet of Chancery.

FOLDED SHEETS.

Folio, 1 fold, 2 leaves.....	4 pages.
Quarto, 2 folds, 4 leaves.....	8 pages.
Octavo, 4 folds, 8 leaves.....	16 pages.
12mo, 6 folds, 12 leaves.....	24 pages.
16mo, 8 folds, 16 leaves.....	32 pages.
18mo, 9 folds, 18 leaves.....	36 pages.
24mo, 12 folds, 24 leaves.....	48 pages.
32mo, 16 folds, 32 leaves.....	64 pages.

SIZE OF SHEETS.

Flat Letter.....	10 x 16
Flat Fools Cap.....	13 x 16
Flat Cap.....	14 x 17
Legal Cap.....	13 x 16
Crown	15 x 19
Double Flat Letter.....	16 x 20
Demy	16 x 21
Double Demy.....	21 x 32
Folio Post.....	17 x 22
Cardboard (allowing $\frac{3}{4}$ inch for trimming).....	22 x 28
Check Folio (Royal).....	19 x 24
Extra Size Folio.....	19 x 23
Double Cap.....	17 x 28
Medium, writing.....	18 x 23
Medium, printing.....	18 x 24
Double Medium.....	23 x 36
Regular Bank.....	19 x 24
Double Royal.....	24 x 38
Super Royal.....	20 x 28
Elephant	23 x 28
Double Elephant.....	27 x 40
Columbier	23 x 34
Imperial	22 x 30
Imperial	22 x 32
Book	24 x 36
Atlas	26 x 33
Antiquarian	31 x 53

The size of the paper used will indicate the dimensions of the folded sheets, Royal, Octavo, Crown, Quarto, Medium, Folio, etc., etc., etc.

DRAWING PAPER—SIZES.

Cap	13	x 16	inches.
Demy	19½	x 15½	inches.
Medium	22	x 18	inches.
Royal	24	x 19	inches.
Super Royal.....	27	x 19	inches.
Elephant	37¾	x 22¾	inches.
Imperial	29	x 21¾	inches.
Columbier	33¾	x 23	inches.
Atlas	33	x 26	inches.
Theorem	34	x 28	inches.
Double Elephant.....	40	x 26	inches.
Antiquarian	52	x 31	inches.
Emperor	40	x 60	inches.
Uncle Sam.....	48	x120	inches.

STANDARD TIME.

Primarily, for the convenience of the railroads, a standard of time was established by mutual agreement in 1883, by which trains are run and local time regulated. According to this system, the United States, extending from 65° to 125° west longitude, is divided into four time sections, each of 15° of longitude, exactly equivalent to one hour, commencing with the 75th meridian. The first (eastern) section includes all territory between the Atlantic coast and an irregular line drawn from Detroit to Charleston, S. C., the latter being its most southern point. The second (central) section includes all the territory between the last-named line and an irregular line from Bismark, N. D., to the mouth of the Rio Grande. The third (mountain) section includes all territory between the last-named line and nearly the western borders of Idaho, Utah and Arizona. The fourth (Pacific) section covers the rest of the country to the Pacific coast. Standard time is uniform inside each of these sections, and the time of each section differs from that next to it by exactly one hour. Thus at 12 noon in New York City (eastern time), the time at Chicago (central time) is 11 o'clock a. m.; at Denver (mountain time), 10 o'clock a. m., and at San Francisco (Pacific time), 9 o'clock a. m. Standard

time is 16 minutes slower at Boston than true local time, 4 minutes slower at New York, 8 minutes faster at Washington, 19 minutes faster at Charleston, 28 minutes slower at Detroit, 18 minutes faster at Kansas City, 10 minutes slower at Chicago, 1 minute faster at St. Louis, 28 minutes faster at Salt Lake City, and 10 minutes faster at San Francisco.

PUNCTUATION MARKS AND RULES FOR USING THEM

The *period* [.] denotes the close of a sentence. A period is placed after every declarative and imperative sentence. All abbreviations are followed by period, also all numbers in the Roman notation.

The *colon* [:] is placed between the chief divisions of a sentence, when these are but slightly connected, and they are themselves divided by some other mark. A colon is used after a sentence which announces a distinct quotation, and is placed between clauses when the connection is so slight that any one of them might be a distinct sentence.

The *semicolon* [;] indicates a longer pause, and also divides compound sentences. A succession of clauses depending on one principal expression, should be separated by a semicolon; is also placed after an expression which introduces particulars. When a clause especially explains the meaning of some other expression, it is separated from that expression by a semicolon, and one is used to divide a sentence into sections, when the various parts are not sufficiently independent to require a colon.

The *comma* [,] denotes a slight pause, and divides a sentence into its component parts. A comma is placed between the particulars mentioned in a succession of words all in the same construction, one is placed between each pair of words, when each pair is in the same construction, also before and one after every parenthetical expression, and is used before a quotation closely connected with the preceding words. Expressions re-

peated must be separated by a comma, as must also a phrase or clause which explains, in any degree, the meaning of any other phrase or clause. All modifying expressions, unless closely connected with the rest of the sentence, are separated by a comma. A comma must be used in sentences which would otherwise be misunderstood, and placed where a word is understood, unless the connection is close.

The *interrogation point* [?] is placed after every sentence which denotes a direct question, and after each successive particular of a series of questions related in sense but distinctive in construction.

The *exclamation point* [!] denotes wonder or astonishment. An exclamation point is placed after every exclamatory sentence, clause, phrase or word. Where special emphasis is required, several exclamation points may be used. An exclamation point, enclosed in parentheses, is used to denote peculiar surprise. Most interjections take an exclamation point after them.

The *dash* [—] indicates a sudden change of subject. A sudden turn in a sentence is shown by a dash. An omission of the middle numbers in a regular series, or of a word, or part of a word, is denoted by a dash, one is usually placed before the answer to a question, when they both belong to the same line, and is often used instead of the parenthesis marks; it is also commonly used before an expression repeated for special emphasis, and always follows the sentence which introduces a quotation, when the quotation commences a new paragraph. A dash is often used to avoid too many paragraphs.

Quotation marks [“ ”] indicate a verbatim quotation. Every quoted passage is enclosed in quotation marks. Quotations consisting of more than one paragraph have the first quotation mark at the beginning of each paragraph, but the second is used only at the end of the last paragraph. When a quoted passage requires special attention, the first quotation mark may be used at the commencement of each line. When one quotation includes another, the latter has but half the first quotation mark before it, and half the second mark after it.

The *stars* [* * *] or N. B. are used to invite special attention.

The *brace* [~] connects several words with one common term.

The *paragraph* [¶] begins a new subject.

The *section* [§] is used to subdivide chapters.

The *asterisk* [*], *parallels* [||], *dagger* [†], *double dagger* [‡] and *section* [§] are used as marginal reference marks.

The *commercial a* [@] is used in market quotations, and signifies "at" or "to."

The *signs* [¢] and lb means "per" and "pound," respectively.

The *parentheses* [()] include something not essential to the sense.

The *ellipsis* [***] [—] denotes the omission of letters or words.

The *index* [☞] points to something of special significance.

Brackets [] are chiefly used to denote corrections.

The *hyphen* [-] connects the syllables or parts of a word.

The *caret* [^] denotes that some letter, word or phrase has been omitted.

The *apostrophe* denotes a contraction.

RULES FOR THE USE OF CAPITALS.

Most words commence with small letters. Capitals must be used only when required by the following rules:

The first word of every sentence and the first word of every line of poetry should begin with a capital letter.

All proper names should begin with capital letters.

Words derived from proper names begin with a capital.

Every word that denotes the Deity should begin with a capital.

Pronouns relating to the Deity should generally commence with a capital.

The months of the years and the days of the week begin with capitals.

The words North, South, East, West, and their compounds and abbreviations, as North-West, commence with capitals when they denote a section of country.

The pronoun I, and the interjection O, are always capitals.

Every direct quotation should begin with a capital letter.

All titles of persons begin with capitals.

All the principal words in the titles of books should begin with capital letters.

The several chapters or other divisions of any book begin with capitals.

Common nouns personified begin with capital letters.

Any word particularly important may begin with a capital letter.

All words denoting religious denominations begin with capital letters.

In all kinds of advertisements nearly all the leading words usually begin with capitals.

In accounts each article mentioned should begin with a capital.

RULES FOR SPELLING.

Words ending in *e* drop that letter before the termination *able*, as in move, movable; unless ending in *ce* or *ge*, when it is retained, as in change, changeable, etc.

Words of one syllable ending in a consonant, with a single vowel before it, double that consonant in derivatives; as ship, shipping, etc. But if ending in a consonant with a double vowel before it, they do not double the consonant in derivatives; as troop, trooper, etc.

Words of more than one syllable, ending in a consonant preceded by a single vowel, and accented on the last syllable, double that consonant in derivatives; as commit, committed, but except chagrin, chagrined.

All words of one syllable ending in *l*, with a single vowel before it, have *ll* at the close; as mill, sell.

All words of one syllable ending in *l*, with a double vowel before it, have only one *l* at the close; as mail, sail.

The words foretell, distill, instill and fulfill, retain the double *l* of their primitives. Derivatives, of dull, skill, will, and full, also retain the *ll* when the accent falls on these words; as dullness, skillful, willful, fullness.

Words of more than one syllable ending in *l* have only one *l* at the close; as delightful, faithful; unless the accent falls on the last syllable, as in befall, etc.

Words ending in *l*, double that letter in the termination *ly*.

Participles ending in *ing*, from verbs ending in *e*, lose the final *e*; as have, having; make, making, etc., but verbs ending in *ee* retain both, as see, seeing. The word dye, to color, however, must retain the *e* before *ing*.

All verbs ending in *ly*, and nouns ending in *ment*, retain the *e* final of the primitives; as brave, bravely; refine, refinement; except words ending in *dge*; as acknowledge, acknowledgment.

Nouns ending in *y*, preceded by a vowel, form their plural by adding *s*; as money, moneys; but if *y* is preceded by a consonant, it is changed to *ies* in the plural; as bounty, bounties.

Compound words whose primitives end in *y*, change the *y* into *i*; as beauty, beautiful.

TABLES OF USE IN PRINTING

LEADS AND SLUGS.

Leads are designated as "—to-Pica," the number being that fraction of a Pica which the lead is, viz.: a 6-to-Pica lead is one-sixth of a Pica in thickness, or six, 6-to-Pica's, are equal to one Pica; four, 4-to-Pica's, are equal to one Pica, and so with other sizes or thickness of leads.

Slugs.—Leads of Nonpareil thickness and greater are called slugs, viz.: Nonpareil slugs, pica slugs, etc.

RULE FOR ESTIMATING BODY TYPE.

To estimate the quantity of type (solid) necessary to fill a given space, multiply the number of square inches by $5\frac{3}{8}$ (estimated weight in ounces, of one square inch of matter, including sorts in case), divide the product by 16 and the result will be the weight of type required. If leaded, a reduction in weight of type may be made from above.

Another rule is as follows: To ascertain the quantity of type (solid) required for newspaper or book work, find the number of square inches to be set, and divide the same by 4, which will give the approximate weight of matter; to which 25 per cent should be added for "sorts," or dead letters remaining in the case. If the matter is to be leaded the weight may be reduced one-quarter.

PROOF-READING

There is considerable latitude in the use of proof-readers' marks and in methods of marking. Figure I shows the uncorrected proof as it goes to the reader for correction. Figure II gives an illustration of the proof marked and ready for marking. It is not to be assumed that there are ever as many errors as are here indicated, in ordinary matter. Matter set on the linotype from clear copy may not have but two or three minor errors. If hand setting is employed, there are generally more errors, depending much upon the character of the copy. For a concise treatment on marks the reader is referred to the title "Marks Used in Proof-Reading."

Referring to the numbered lines in Figure II, the following are the operations to be performed to correct the proof as marked:

Line 1. Bring the heading to the center; set in caps. Set name "Thomas Carlyle" in italics.

Line 2. Indent paragraph; delete apostrophe; set name "Burns" in small caps. Make cap *W* lower case; insert *y* in place of marked letters.

Line 3. Turn inverted *l*.

Line 4. Transpose indicated words; raise marked word to line with the rest; insert *ed* at end of line; turn hyphen.

Line 5. Delete *d*; transpose letters indicated.

Line 6. Insert *u* as indicated. Rearrange spacing for line as indicated by carets; insert hyphen at end of line.

Line 7. Clean.

Line 8. Insert *o* in place of letter marked. Insert *o* in place of inverted marked letter.

ESSAY ON BURNS — THOS. CARLISLE.

Burn's first came upon the World as a prodigee; and was, in that character, entertained by it, in the usual fashion, with vague, loud, tumultuous wonder, speedily subsiding into secure and neglect, till his early and most mournful death again awakened an enthusiasm for him, which, especially as there was now nothing to be done, and much to be spoken, has prologed itself even to our own time.

It is true, the 9 days have long since elapsed, and the very continuance of this clamour proves that Burns was no vulgar wonder. Accordingly, He has come to rest more & more exclusively on his own intrinsic merits, and may now be wellnigh shorn of that casual radiance he appears not only as a true English poet, but as one of the most considerable British men of the 18th century. Let it not be objected that he did little. He did very much, if we consider how where and we must recollect that he had his every materials to discover; fore the for the metal he Worked in lay hid under the desert, where no eye but his has guesst its existence; and we may almost say that with his own hands he had to construct the tools for fashioning it. For he found himself in deepest security — without help, instruction, without model, or with model, only of the meanest sort. An educated man stands, as it were, in the midst of a boundless arsenal and magazine, filled with all the weapon and engines which man's skill has been able to devise from the earliest rowed from all Past ages. How different in his state time, and he works, accordingly with a strength borrowed from the storehouse, and feels that its gates must be stormed, or remain forever shut against him? * * * a dwarf back his steamegens may remove mountains, but no dwarf will huc them down with a pickax, and he must be a Titan who hurls them abroad with his arms.

Fig. I

Lines 9 and 10. Insert *n* as indicated by caret. Insert period in place of marked comma; run in line 10. Capitalize *i*; spell out (sp.) 9. Insert quotation marks as indicated by carets.

Line 11. Clean.

Line 12. Insert cap *B* and lower case *a*, as indicated. Insert from copy omitted words as indicated by caret; change *H* to lower case.

Line 13. Broken letter; spell out *d*.

Line 14. Broken letter; change *e* to *d*. Delete *l* and insert hyphen.

Line 15. Insert comma.

Line 16. Delete word marked, inserting word on

1	center/caps	Essay on Burns - Tracy, Cassin's	ma/2/y/stal
2	o/2/s/c	Burns first came upon the World as a prodigy: and	2 cl/y
3		was, in that character, entertained by it, in the usual	o ed/9
4	to/	fashion, with vague loud, tumultuous wonder, speedily	
5	2/	subsiding into censure and neglect, till his early	even 2/-
6	u/	and most mournful death, again awakened an enthusiasm	
7		for him, which, especially as there was now	
8	of	nothing to be done, and much to be spoken, has	o/ no 7
9	cap/sp/	prolonged itself even to our own time	
10		It is true, the days have long since elapsed, and	
11	B/a	the very continuance of this clamour proves that	out, see copy/p.
12	x/sp	Burns was no vulgar wonder. Accordingly, he has	l/-
13	x/d	come to rest more & more exclusively on his own	
14		intrinsic merits, and may now be with high shorn of	tit lead
15	British	that casual radiance, he appears not only as a true	
16	sp	English poet, but as one of the most considerable	2 1/2/remember
17		British men of the 18th century. Let it not be ob-	2
18	to as	jected that he did little. He did very much, if we	2 ed/
19	numbered	consider how where and we must recollect	
20	o/2	that he had his every materials to discover. two site	
21	l c	for the metal he worked in lay hid under the desert,	
22	e/	where no eye but his has guessed its existence; and	
23	#	we may almost say that with his own hands he had to	
24		construct the tools for fashioning it. For he found	la/≡
25	rebase	himself in desperate security & without	
26	without	help, instruction, without model; or with model	
27		only of the meanest sort. An educated man stands, as	9/9
28	f/x	it were, in the midst of a boundless arsenal and maga-	2/#/m
29	m/te	zine, filled with all the weapons and engines which	2/s/ital
30	l c.	his skill has been able to derive from the earliest	tar lines
31		times; and he works, accordingly, with a strength bor-	
32	↓	rowed from all past ages. How different is his state	
33	se/	time: he stands on the outside of that storehouse, and feels	
34		that its gates must be stormed, or remain forever shut	
35	up/!	against him! . . . & dwarf be his steamers	born
36	/cap	may remove mountains, but no dwarf will hit them	behind /-/m/i
37	o/2:	down with a pickaxe; and he must be a Titan who	ew
38		hurls them abroad with his arms.	

Fig. II

- margin. Let most stand, it was wrongly marked out.
- Line 17. Spell out ringed word. Insert lead above the line.
- Line 18. Delete marked word.
- Line 19. Transpose words in order numbered; bring this line and line above to margin. Change marked letter to cap W; change marked word to word on margin.
- Line 20. Turn marked letter; delete e. Delete marked words.
- Line 21. Make cap W lower case. Insert e as indicated by caret.
- Line 22. Insert e as marked. Insert ed as marked.

Line 23. Insert space as indicated by caret.

Line 24. Push down space.

Line 25. Respace marked words. Insert *obs* as marked; change marked dash to comma; align final letter of this and preceding and following line.

Line 26. Insert word on margin as indicated by caret.

Line 27. Make new paragraph as indicated.

Line 28. Turn marked letters.

Line 29. Set *fl* as a logotype; change broken letter. Bring *s* to left, inserting space after it; change *h* to *n*.

Line 30. Change *n* to *m*; transpose ringed characters. Change *z* to *s*.

Line 31. Change cap *P* to lower case. Change *n* to *s*; italicize *his*.

Line 32. Push down lead. Transpose lines 32 and 31.

Line 33. Insert *e* in place of caret.

Line 34. Change italicized word to roman.

Line 35. Wrong font *s* to be changed; interrogation mark to be changed to exclamation point; change lower case *a* to cap. Change marked word to margin word; insert hyphen, *n* and *i* as indicated.

Line 36. Straighten line. Change spelling of *hue* as indicated in margin.

Line 37. Turn *n*; insert *e* as marked.

Line 38. Clean.

MARKS USED IN PROOF-READING

For &	Take out; delete. This character is variously made, these forms being common.
#	Space; more space;—often used in conjunction with the caret.
↓	Push down;—designating a space or quad which shows black.
9	Turn inverted letter or character so as to show correct.
.....	Let the matter stand; do not change;— <i>stet</i> is placed in the margin.
tr.	Transpose letters, characters, leads, lines or other matter indicated.
[,]	Bring to left or right, toward face of bracket;—if with <i>center</i> , bring to center.
□	Indent line one em of type of its own measure.
x	Take out broken, worn or disfigured letter or character.
o	Insert period;—often called “proof-reader’s period,” used in writing for distinctness.
c	Close up letters, parts of words or other open space.
=	Bring matter up or down so as to present a straight line or lines.
||	Bring matter to right or left so as to make margin even.
┌, └	Bring matter up or down, whichever way face of bracket is turned.
w.f.	Letter or character indicated is “wrong font”; supply one of right font.
ital	Abbreviation for <i>italic</i> ; change to italic. The abbreviation for roman is <i>rom</i> .
lc.	Change indicated letter, word or other matter to lower case.
<u>aa</u>	Change to italic, small capitals and capitals respectively, denoted by number of lines.
¶	Indent so as to make paragraph; begin new paragraph.
ae	Set as a logotype instead of in two or more letters.

GEOGRAPHICAL TABLES

Population of Incorporated Places; Census of 1900

One Hundred Largest Cities

New York, N. Y.....	3,437,202	Wilmington, Del.....	76,508
Chicago, Ill.	1,698,575	Camden, N. J.....	75,935
Philadelphia, Pa.....	1,293,697	Trenton, N. J.....	73,307
St. Louis, Mo.....	575,238	Troy, N. Y.....	75,057
Boston, Mass.....	560,892	Bridgeport, Ct.....	70,996
Baltimore, Md.....	508,957	Lynn, Mass.....	68,513
Cleveland, Ohio.....	381,768	Oakland, Cal.....	66,960
Buffalo, N. Y.....	352,387	Lawrence, Mass.....	62,559
San Francisco, Cal..	342,782	New Bedford, Mass..	62,442
Cincinnati, Ohio.....	325,902	Des Moines, Iowa....	62,139
Pittsburg, Pa.....	321,616	Springfield, Mass....	62,059
New Orleans, La....	287,104	Somerville, Mass....	61,643
Detroit, Mich.....	285,704	Hoboken, N. J.....	59,364
Milwaukee, Wis.....	285,315	Evansville, Ind.....	59,007
Washington, D. C...	278,718	Manchester, N. H...	56,987
Newark, N. J.....	246,070	Utica, N. Y.....	56,383
Jersey City, N. J...	206,433	Peoria, Ill.....	56,100
Louisville, Ky.....	204,731	Charleston, S. C....	55,807
Minneapolis, Minn...	202,718	Savannah, Ga.....	54,244
Providence, R. I....	175,597	Salt Lake City, Utah	53,531
Indianapolis, Ind....	169,164	San Antonio, Tex...	53,321
Kansas City, Mo....	163,752	Duluth, Minn.....	52,969
St. Paul, Minn.....	163,065	Erie, Pa.....	52,733
Rochester, N. Y.....	162,608	Elizabeth, N. J.....	52,130
Denver, Col.....	133,859	Wilkes-Barre, Pa....	51,721
Toledo, Ohio.....	131,822	Kansas City, Kan...	51,418
Allegheny, Pa.....	129,896	Harrisburg, Pa.....	50,167
Columbus, Ohio.....	125,560	Portland, Me.....	50,145
Worcester, Mass.....	118,421	Yonkers, N. Y.....	47,931
Syracuse, N. Y.....	108,374	Norfolk, Va.....	46,624
New Haven, Ct.....	108,027	Waterbury, Ct.....	45,859
Paterson, N. J.....	105,171	Holyoke, Mass.....	45,712
Fall River, Mass.....	104,863	Fort Wayne, Ind....	45,115
St. Joseph, Mo.....	102,979	Youngstown, Ohio..	44,885
Omaha, Neb.....	102,555	Houston, Tex.....	44,633
Los Angeles, Cal....	102,479	Covington, Ky.....	42,938
Memphis, Tenn.....	102,320	Akron, Ohio.....	42,728
Scranton, Pa.....	102,026	Dallas, Tex.....	42,638
Lowell, Mass.....	94,969	Saginaw, Mich.....	42,345
Albany, N. Y.....	94,151	Lancaster, Pa.	41,459
Cambridge, Mass....	91,886	Lincoln, Neb.....	40,169
Portland, Ore.....	90,426	Brockton, Mass.....	40,063
Atlanta, Ga.....	89,872	Binghamton, N. Y...	39,647
Grand Rapids, Mich.	87,565	Augusta, Ga.....	39,441
Dayton, Ohio.....	85,333	Honolulu, Hawaii....	39,306
Richmond, Va.....	85,050	Pawtucket, R. I.....	39,231
Nashville, Tenn.....	80,865	Altoona, Pa.....	38,973
Seattle, Wash.....	80,671	Wheeling, W. Va....	38,878
Hartford, Ct.....	79,850	Mobile, Ala.....	38,469
Reading, Pa.....	78,961	Birmingham, Ala. .	38,415

Incorporation Places Having 5,000 Inhabitants or More

Adrian, Mich.....	9,654	Bayonne, N. J.....	32,722
Akron, Ohio.....	42,728	Beatrice, Neb.....	7,875
Alameda, Cal.....	16,464	Beaumont, Tex.....	9,427
Albany, N. Y.....	94,151	Beaverdam, Wis.....	5,128
Albert Lea, Minn...	5,028	Beaver Falls, Pa....	10,054
Albuquerque, N. M..	6,238	Bedford, Ind.....	6,115
Alexandria, Ind.....	7,221	Bellaire, Ohio.....	9,912
Alexandria, La.....	5,648	Bellefontaine, Ohio..	6,649
Alexandria, Va.....	14,528	Belleville, Ill.....	17,484
Allegheny, Pa.....	129,896	Bellevue, Ky.....	6,332
Allentown, Pa.....	35,416	Beloit, Wis.....	10,436
Alliance, Ohio.....	8,974	Belvidere, N. J.....	6,937
Alpena, Mich.....	11,802	Bennington, Vt.....	5,656
Alton, Ill.....	14,210	Benton Harbor, Mich	6,562
Altoona, Pa.....	38,973	Berkeley, Cal.....	13,214
Americus, Ga.....	7,674	Berlin, N. H.....	8,886
Amsterdam, N. Y...	20,929	Bessemer, Ala.....	6,358
Anaconda, Mont.....	9,453	Bethlehem, Pa.....	7,293
Anderson, Ind.....	20,178	Beverly, Mass.....	13,884
Anderson, S. C.....	5,498	Biddeford, Me.....	16,145
Annapolis, Md.....	8,525	Biloxi, Miss.....	5,467
Ann Arbor, Mich....	14,509	Binghamton, N. Y...	39,647
Anniston, Ala.....	9,695	Birmingham, Ala...	38,415
Ansonia, Ct.....	12,681	Bloomfield, N. J....	9,668
Antigo, Wis.....	5,145	Bloomington, Ill....	23,386
Appleton, Wis.....	15,085	Bloomington, Ind....	6,460
Archbald, Pa.....	5,396	Bloomsburg, Pa.....	6,170
Ardmore, I. T.....	5,681	Blue Island, Ill.....	6,114
Argentine, Kan.....	5,878	Boise, Idaho.....	5,957
Arkansas City, Kan.	6,140	Bonham, Tex.....	5,042
Asheville, N. C.....	14,694	Boone, Iowa.....	8,880
Ashland, Ky.....	6,800	Boston, Mass.....	560,892
Ashland, Pa.....	6,438	Boulder, Col.....	6,150
Ashland, Wis.....	13,074	Bowling Green, Ky..	8,226
Ashtabula, Ohio....	12,949	Bowling Green, O...	5,067
Astoria, Ore.....	8,381	Braddock, Pa.....	15,654
Atchison, Kan.....	15,722	Bradford, Pa.....	15,029
Athens, Ga.....	10,245	Brainerd, Minn.....	7,524
Atlanta, Ga.....	89,872	Brattleboro, Vt.....	5,297
Atlantic City, Iowa.	5,046	Brazil, Ind.....	7,786
Atlantic City, N. J..	27,838	Brenham, Tex.....	5,968
Auburn, Me.....	12,951	Bridgeport, Ct.....	70,996
Auburn, N. Y.....	30,345	Bridgeton, N. J....	13,913
Augusta, Ga.....	39,441	Bristol, Ct.....	6,268
Augusta, Me.....	11,683	Bristol, Pa.....	7,104
Aurora, Ill.....	24,147	Bristol, Tenn.....	5,271
Aurora, Mo.....	6,191	Brockton, Mass....	40,063
Austin, Minn.....	5,474	Brookfield, Mo.....	5,484
Austin, Tex.....	22,258	Brownsville, Tex....	6,305
Baker City, Ore....	6,663	Brunswick, Ga.....	9,081
Baltimore, Md.....	508,957	Brunswick, Me.....	5,210
Bangor, Me.....	21,850	Bucyrus, Ohio.....	6,560
Baraboo, Wis.....	5,751	Buffalo, N. Y.....	352,387
Barre, Vt.....	8,448	Burlington, Iowa...	23,201
Batavia, N. Y.....	9,180	Burlington, N. J....	7,392
Bath, Me.....	10,477	Burlington, Vt.....	18,640
Baton Rouge, La....	11,269	Butler, Pa.....	10,853
Battle Creek, Mich..	18,563	Butte, Mont.....	30,470
Bay City, Mich.....	27,628	Cadillac, Mich.....	5,997

Incorporated Places Having 5,000 Inhabitants or More

Continued

Cairo, Ill.....	12,566	Columbus, Ohio	125,560
Calais, Me.....	7,655	Concord, N. H.....	19,632
Cambridge, Md.....	5,747	Concord, N. C.....	7,910
Cambridge, Mass....	91,886	Conneaut, Ohio	7,133
Cambridge, Ohio....	8,241	Connellsville, Pa....	7,160
Camden, N. J.....	75,935	Connersville, Ind....	6,836
Canal Dover, Ohio..	5,422	Conshohocken, Pa...	5,762
Canadaigua, N. Y...	6,151	Corning, N. Y.....	11,061
Canton, Ill.....	6,564	Corry, Pa.....	5,369
Canton, Ohio.....	30,667	Corsicana, Tex.	9,313
Carbondale, Pa.....	13,536	Cortland, N. Y.....	9,014
Carlisle, Pa.....	9,626	Coshocton, Ohio	6,473
Carnegie, Pa.....	7,330	Council Bluffs, Iowa	25,802
Carthage, Mo.....	9,416	Covington, Ky.	42,938
Catskill, N. Y.....	5,484	Crawfordsville, Ind..	6,649
Cedar Falls, Iowa...	5,319	Creston, Iowa	7,752
Cedar Rapids, Iowa.	25,656	Cripple Creek, Col..	10,147
Centerville, Iowa...	5,256	Crookston, Mich. ...	5,359
Central Falls, R. I.	18,167	Cumberland, Md. ...	17,128
Centralia, Ill.....	6,721	Dallas, Tex.....	42,638
Chambersburg, Pa. .	8,864	Danbury, Ct.	16,537
Champaign, Ill.	9,098	Danville, Ill.	16,354
Charlerol, Pa.	5,930	Danville, Pa.	8,042
Charleston, Ill.	5,488	Danville, Va.	16,520
Charleston, S. C....	55,807	Davenport, Iowa ...	35,254
Charleston, W. Va..	11,099	Dayton, Ky.	6,104
Charlotte, N. C....	18,091	Dayton, Ohio	85,333
Charlottesville, Va..	6,449	Decatur, Ill.	20,754
Chattanooga, Tenn..	30,154	Defiance, Ohio	7,579
Cheboygan, Mich....	6,489	De Kalb, Ill.....	5,904
Chelsea, Mass.	34,072	Delaware, Ohio	7,940
Chester, Pa.	33,988	Denison, Tex.	11,807
Cheyenne, Wyo.	14,087	Denver, Col.	133,859
Chicopee, Mass.	19,167	Derby, Ct.	7,930
Chicago, Ill.	1,698,575	Des Moines, Iowa...	62,139
Chicago Heights, Ill.	5,100	De Soto, Mo.	5,611
Chillicothe, Mo.	6,905	Detroit, Mich.	285,704
Chillicothe, Ohio ...	12,976	Dixon, Ill.	7,917
Chippewa Falls, Wis	8,094	Dover, N. H.	13,207
Cincinnati, Ohio....	325,902	Dover, N. J.....	5,938
Circleville, Ohio	6,991	Dubois, Pa.	9,375
Clarksville, Tenn. .	9,431	Dubuque, Iowa	36,297
Clearfield, Pa.	5,081	Duluth, Minn.	52,969
Cleburne, Tex.	7,493	Dunkirk, N. Y.....	11,616
Cleveland, Ohio	381,768	Dunmore, Pa.	12,583
Clinton, Iowa	22,698	Duquesne, Pa.	9,036
Clinton, Mo.	5,061	Durham, N. C.....	6,679
Coatesville, Pa.	5,721	East Liverpool, Ohio	16,485
Cohoes, N. Y.....	23,910	Easton, Pa.	25,238
Coldwater, Mich....	6,216	East Orange, N. J..	21,506
Colo. Springs, Col..	21,085	Eastport, Me.	5,311
Columbia, Mo.....	5,651	East St. Louis, Ill..	29,655
Columbia, Pa.	12,316	Eau Claire, Wis....	17,517
Columbia, S. C.....	21,108	Edwardsville, Pa. ..	5,165
Columbia, Tenn. ...	6,052	Elgin, Ill.	22,433
Columbus, Ga.	17,614	Elizabeth, N. J.....	52,130
Columbus, Ind.	8,130	Elizabeth, N. C.....	6,348
Columbus, Miss.	6,484	Eikhart, Ind.	15,124

Incorporated Places Having 5,000 Inhabitants or More

Continued

Elmira, N. Y.....	35,672	Goldsboro, N. C.	5,877
El Paso, Tex.....	15,906	Goshen, Ind.	7,810
Elwood, Ind.	12,950	Grafton, W. Va.....	5,650
Elyria, Ohio	8,791	Grand Forks, N. D. ..	7,652
Emporia, Kan.	8,223	Grand Island, Neb..	7,554
Englewood, N. J....	6,253	Grand Rapids, Mich.	87,565
Erie, Pa.	52,733	Great Falls, Mont...	14,930
Escanaba, Mich.	9,549	Green Bay, Wis.....	18,684
Etna, Pa.	5,384	Greensboro, N. C. ..	10,035
Eureka, Cal.	7,327	Greensburg, Ind.	5,034
Evanston, Ill.	19,259	Greensburg, Pa.	6,508
Evansville, Ind.	59,007	Greenville, Miss.	7,642
Everett, Mass.	24,336	Greenville, Ohio	5,501
Everett, Wash.	7,838	Greenville, S. C.....	11,860
Fairmont, W. Va....	5,655	Greenville, Tex.	6,860
Fall River, Mass....	104,863	Griffin, Ga.	6,857
Fargo, N. Dak.....	9,589	Guthrie, Okla.	10,006
Faribault, Minn.	7,868	Hackensack, N. J... ..	9,443
Fergus Falls, Minn.	6,072	Hagerstown, Md. ..	13,591
Findlay, Ohio	17,613	Hamilton, Ohio	23,914
Fitchburg, Mass.	31,531	Hammond, Ind.	12,376
Flint City, Mich....	13,103	Hannibal, Mo.	12,780
Florence, Ala.	6,478	Hanover, Pa.	5,302
Fond du Lac, Wis..	15,110	Harrisburg, Pa.	50,167
Fort Dodge, Iowa..	12,162	Harrison, N. J.....	10,596
Fort Madison, Iowa.	9,278	Hartford, Ct.	79,850
Fort Scott, Kan....	10,322	Hartford, Ind.	5,912
Fort Smith, Ark....	11,587	Harvey, Ill.	5,395
Fort Wayne, Ind....	45,115	Hastings, Neb.	7,188
Fort Worth, Tex....	26,688	Haverhill, Mass.	37,175
Fostoria, Ohio	7,730	Haverstraw, N. Y... ..	5,935
Frankfort, Ind.	7,100	Hazelton, Pa.	14,230
Frankfort, Ky.	9,487	Helena, Ark.	5,550
Franklin, N. H.....	5,846	Helena, Mont.	10,770
Franklin City, Pa... ..	7,317	Henderson, Ky.	10,272
Frederick, Md.	9,296	Herkimer, N. Y.....	5,555
Fredericksburg, Va..	5,068	Hillsboro, Tex.	5,346
Freeland, Pa.	5,254	Hoboken, N. J.....	59,364
Freeport, Ill.	13,258	Holland, Mich.	7,790
Fremont, Neb.	7,241	Holyoke, Mass.	45,712
Fremont, Ohio	8,439	Homestead, Pa.	12,154
Fresno, Cal.	12,470	Honolulu, Hawaii ..	39,306
Frostburg, Md.	5,274	Hoosick Falls, N. Y. .	5,671
Fulton, N. Y.....	5,281	Hopkinsville, Ky.	7,280
Gainesville, Tex.	7,874	Hornellsville, N. Y... ..	11,918
Galena, Ill.	5,005	Hot Springs, Ark... ..	9,973
Galena, Kan.	10,155	Houston, Tex.	44,633
Galesburg, Ill.	18,607	Hudson, N. Y.....	9,528
Gallio, Ohio	7,282	Huntington, Pa.	6,053
Gallipolis, Ohio	5,432	Huntington, Ind.	9,491
Galveston, Tex.	37,789	Huntington, W. Va. ..	11,923
Gardiner, Me.	5,501	Huntsville, Ala.	8,068
Geneva, N. Y.	10,433	Hutchinson, Kan.	9,379
Glens Falls, N. Y....	12,613	Ilion, N. Y.	5,138
Glenville, Ohio	5,588	Independence, Mo... ..	6,974
Gloucester, Mass. ..	26,121	Indianapolis, Ind....	169,164
Gloucester, N. J....	6,840	Iola, Kan.....	5,791
Gloversville, N. Y... ..	18,349	Ionia City, Mich.....	5,209

Incorporated Places Having 5,000 Inhabitants or More

Continued

Iowa City, Iowa.....	7,987	Lebanon, Pa.....	17,628
Iron Mountain, Mich.....	9,242	Lewiston, Me.....	23,761
Ironton, Ohio.....	11,868	Lexington, Ky.....	26,369
Ironwood, Mich.....	9,705	Lima, Ohio.....	21,723
Irvington, N. J.....	5,255	Lincoln, Ill.....	8,962
Ishpeming, Mich.....	13,255	Lincoln, Neb.....	40,169
Ithaca, N. Y.....	13,136	Litchfield, Ill.....	5,918
Jackson, Mich.....	25,180	Little Falls, Minn....	5,774
Jackson, Miss.....	7,816	Little Falls, N. Y....	10,381
Jackson, Tenn.....	14,511	Little Rock, Ark....	38,307
Jacksonville, Fla....	28,429	Lock Haven, Pa....	7,210
Jacksonville, Ill.....	15,078	Lockport, N. Y.....	16,581
Jamestown, N. Y....	22,892	Logan, Utah.....	5,451
Janesville, Wis.....	13,185	Logansport, Ind....	16,204
Jeannette, Pa.....	5,865	Long Branch, N. J..	8,872
Jefferson City, Mo... .	9,664	Lorain, Ohio.....	16,028
Jeffersonville, Ind....	10,774	Los Angeles, Cal....	102,479
Jersey City, N. J....	206,433	Louisiana City, Mo..	5,131
Johnstown, N. Y....	10,130	Louisville, Ky.....	204,731
Johnstown, Pa.....	35,936	Lowell, Mas.....	94,969
Joliet, Ill.....	29,353	Ludington, Mich....	7,166
Joplin, Mo.....	26,023	Lynchburg, Va.....	18,891
Kalamazoo, Mich....	24,404	Lynn, Mass.....	68,513
Kane, Pa.....	5,296	McKeesport, Pa....	34,227
Kankakee, Ill.....	13,595	McKee's Rocks, Pa..	6,352
Kansas City, Kan... .	51,418	Macomb, Ill.....	5,375
Kansas City, Mo....	163,752	Macon, Ga.....	23,272
Kaukauna, Wis.....	5,115	Madison, Ind.....	7,835
Kearney, Neb.....	5,634	Madison, Wis.....	19,164
Kearny, N. J.....	10,896	Mahanoy, Pa.....	13,504
Keene, N. H.....	9,165	Malden, Mass.....	33,664
Kenosha, Wis.....	11,606	Malone, N. Y.....	5,935
Kenton, Ohio.....	6,852	Manchester, N. H..	56,987
Keokuk, Iowa.....	14,641	Manchester, Va.....	9,715
Kewanee, Ill.....	8,382	Manistee, Mich.....	14,260
Key West, Fla.....	17,114	Manitowoc, Wis....	11,786
Kingston, N. Y.....	24,535	Mankato, Minn....	10,599
Kirksville, Mo.....	5,966	Mansfield, Ohio.....	17,640
Knoxville, Tenn....	32,637	Marietta, Ohio.....	13,343
Kokomo, Ind.....	10,609	Marinette, Wis....	16,195
Laconia, N. H.....	8,042	Marion, Ind.....	17,337
Lacrosse, Wis.....	28,895	Marion, Ohio.....	11,862
Lafayette, Ind.....	18,116	Marlboro, Mass....	13,609
Lake Charles, La....	6,680	Marquette, Mich....	10,058
Lancaster, Ohio.....	8,991	Marshall, Mo.....	5,086
Lancaster, Pa.....	41,459	Marshall, Tex.....	7,855
Lansing, Mich.....	16,485	Marshalltown, Iowa.	11,544
Lansingburg, N. Y..	12,595	Marshfield, Wis....	5,240
Laporte, Ind.....	7,113	Martinsburg, W. Va.	7,564
Laramie, Wyo.....	8,207	Martin's Ferry, Ohio	7,760
Laredo, Tex.....	13,429	Mason City, Iowa... .	6,746
La Salle, Ill.....	10,446	Massillon, Ohio.....	11,944
Laurium, Mich.....	5,643	Matawan, N. Y.....	5,807
Lawrence, Kan.....	10,862	Mattoon, Ill.....	9,622
Lawrence, Mass....	62,559	Maysville, Ky.....	6,423
Lead, S. Dak.....	6,210	Meadville, Pa.....	10,291
Leadville, Col.....	12,445	Medford, Mass.....	18,244
Leavenworth, Kan..	20,735	Melrose, Mass.....	12,962

Incorporated Places Having 5,000 Inhabitants or More

Continued

Memphis, Tenn.....	102,320	N. Brunswick, N. J.	20,006
Menasha, Wis.....	5,589	Newburgh, N. Y.....	24,943
Menominee, Mich....	12,818	Newburgh, Ohio.....	5,909
Menominee, Wis.....	5,655	Newburyport, Mass..	14,478
Meriden, Conn.....	24,296	Newcastle, Pa.....	28,339
Meridian, Miss.....	14,050	New Haven, Conn...	108,027
Merrill, Wis.....	8,537	New Iberia, La.....	6,815
Mexico, Mo.....	5,099	New London, Conn..	17,548
Michigan City, Ind..	14,850	New Orleans, La....	287,104
Middletown, Conn..	9,589	New Philadelphia, O.	6,213
Middletown, N. Y....	14,522	Newport, Ky.....	28,301
Middletown, Ohio...	9,215	Newport, R. I.....	22,034
Middletown, Pa.....	5,608	Newport News, Va..	19,635
Millvale, Pa.....	6,736	New Rochelle, N. Y.	14,720
Millville, N. J.....	10,583	Newton, Kan.....	6,208
Milton, Pa.....	6,175	Newton, Mass.....	33,587
Milwaukee, Wis.....	285,315	New Ulm, Minn.....	5,403
Minneapolis, Minn..	202,718	N. Whatcom, Wash.	6,834
Mishawaka, Ind.....	5,560	New York, N. Y....	3,437,202
Moberly, Mo.....	8,012	Niagara Falls, N. Y.	19,457
Mobile, Ala.....	38,469	Niles, Ohio.....	7,468
Moline, Ill.....	17,248	Nome, Alaska.....	12,488
Monmouth, Ill.....	7,460	Norfolk, Va.....	46,624
Monongahela, Pa....	5,173	Norristown, Pa.....	22,265
Monroe, La.....	5,428	North Adams, Mass.	24,200
Monroe, Mich.....	5,043	Northampton, Mass.	18,643
Montclair, N. J....	13,962	North Braddock, Pa.	6,535
Montgomery, Ala....	30,346	N. Plainfield, N. J..	5,009
Montpelier, Vt.....	6,266	N. Tonawanda, N. Y.	9,069
Morristown, N. J....	11,267	Norwalk, Conn.....	6,125
Moundsville, W. Va.	5,362	Norwalk, Ohio.....	7,074
Mt. Carmel, Pa.....	13,179	Norwich, Conn.....	17,251
Mt. Clemens, Mich..	6,576	Norwich, N. Y.....	5,766
Mt. Vernon, Ill.....	5,216	Norwood, Ohio.....	6,480
Mt. Vernon, Ind.....	5,132	Oakland, Cal.....	66,960
Mt. Vernon, N. Y....	21,228	Oconto, Wis.....	5,646
Mt. Vernon, Ohio....	6,633	Oelwein, Iowa.....	5,142
Muncie, Ind.....	20,942	Ogden, Utah.....	16,313
Murphysboro, Ill....	6,463	Ogdensburg, N. Y..	12,633
Muscatine, Iowa....	14,073	Oil City, Pa.....	13,264
Muskegon, Mich.....	20,818	Oklahoma City, Okla.	10,037
Nanticoke, Pa.....	12,116	Old Forge, Pa.....	5,630
Nashua, N. H.....	23,898	Oldtown, Me.....	5,763
Nashville, Tenn.....	80,865	Olean, N. Y.....	9,462
Natchez, Miss.....	12,210	Olyphant, Pa.....	6,180
Naugatuck, Conn....	10,541	Omaha, Neb.....	102,555
Nebraska City, Neb.	7,380	Oneida, N. Y.....	6,364
Neenah, Wis.....	5,954	Oneonta, N. Y.....	7,147
Negaunee, Mich.....	6,935	Orange City, N. J....	24,141
Nelsonville, Ohio....	5,421	Oshkosh, Wis.....	28,284
Nevada, Mo.....	7,461	Oskaloosa, Iowa....	9,212
New Albany, Ind....	20,628	Ossining, N. Y.....	7,939
Newark, N. J.....	246,070	Oswego, N. Y.....	22,199
Newark, Ohio.....	18,157	Ottawa, Ill.....	10,588
New Bedford, Mass.	62,442	Ottawa, Kan.....	6,934
Newbern, N. C.....	9,090	Ottumwa, Iowa....	18,197
New Brighton, Pa....	6,820	Owatonna, Minn....	5,561
New Britain, Conn..	25,998	Owego, N. Y.....	5,039

Incorporated Places Having 5,000 Inhabitants or More

Continued

Owensboro, Ky.....	13,189	Rahway, N. J.....	7,935
Owosso, Mich.....	8,696	Raleigh, N. C.....	13,643
Paducah, Ky.....	19,446	Reading, Pa.....	78,961
Painesville, Ohio....	5,024	Red Bank, N. J....	5,428
Palestine, Tex.....	8,297	Red Wing, Minn....	7,525
Pana, Ill.....	5,530	Rensselaer, N. Y....	7,466
Paris, Ill.....	6,105	Richmond, Ind.....	18,226
Paris, Tex.....	9,358	Richmond, Va.....	85,050
Parkersburg, W. Va.	11,703	Riverside, Cal.....	7,973
Parsons, Kan.....	7,682	Roanoke, Va.....	21,495
Pasadena, Cal.....	9,117	Rochester, Minn....	6,843
Passaic, N. J.....	27,777	Rochester, N. H....	8,466
Paterson, N. J.....	105,171	Rochester, N. Y....	162,608
Pawtucket, R. I....	39,231	Rockford, Ill.....	31,051
Peekskill, N. Y.....	10,358	Rock Hill, S. C....	5,485
Pekin, Ill.....	8,420	Rock Island, Ill....	19,493
Pensacola, Fla.....	17,747	Rockland, Me.....	8,150
Peoria, Ill.....	56,100	Rockville, Conn....	7,287
Perth Amboy, N. J..	17,699	Rome, Ga.....	7,291
Peru, Ill.....	6,863	Rome, N. Y.....	15,343
Peru, Ind.....	8,463	Rutland, Vt.....	11,499
Petersburg, Va.....	21,810	Saco, Me.....	6,122
Petoskey, Mich.....	5,285	Sacramento, Cal....	29,282
Philadelphia, Pa....	1,293,697	Saginaw, Mich.....	42,345
Phillipsburg, N. J..	10,052	St. Albans, Vt.....	6,239
Phoenix, Ariz.....	5,544	St. Charles, Mo....	7,982
Phoenixville, Pa....	9,196	St. Cloud, Minn....	8,663
Pine Bluff, Ark.....	11,496	St. Johnsburg, Vt..	5,666
Piqua, Ohio.....	12,172	St. Joseph, Mich....	5,155
Pittsburg, Kan.....	10,112	St. Joseph, Mo.....	102,979
Pittsburg, Pa.....	321,616	St. Louis, Mo.....	575,238
Pittsfield, Mass....	21,766	St. Mary's, Ohio....	5,359
Pittston, Pa.....	12,556	St. Paul, Minn....	163,065
Pittsfield, N. J.....	15,369	Salem, Mass.....	35,956
Plattsburg, N. Y....	8,434	Salem, N. J.....	5,811
Plymouth, Pa.....	13,649	Salem, Ohio.....	7,582
Pomona, Cal.....	5,526	Salina, Kan.....	6,074
Pontiac Mich.....	9,769	Salisbury, N. C....	6,277
Portage, Wis.....	5,459	Salt Lake, Utah....	53,531
Port Chester, N. Y..	7,440	San Antonio, Tex...	53,321
Port Huron, Mich...	12,158	San Bernardino, Cal.	6,150
Port Jervis, N. Y....	9,385	San Diego, Cal.....	17,700
Portland, Me.....	50,145	Sandusky, Ohio....	19,664
Portland, Ore.....	90,426	San Francisco, Cal..	342,782
Portsmouth, N. H....	10,637	San Jose, Cal.....	21,500
Portsmouth, Ohio....	17,870	Santa Barbara, Cal..	6,587
Portsmouth, Va.....	17,427	Santa Cruz, Cal....	5,659
Pottstown, Pa.....	13,696	Sante Fe, N. M....	5,603
Pottsville, Pa.....	15,710	Santa Rosa, Cal....	6,673
Poughkeepsie, N. Y.	24,029	Saratoga Sp's, N Y.	12,409
Princeton, Ind.....	6,041	Sault Ste. Marie, Mh.	10,538
Providence, R. I....	175,597	Savannah, Ga.....	54,244
Provo, Utah.....	6,185	Sayre, Pa.....	5,243
Pueblo, Col.....	28,157	Schenectady, N. Y..	31,682
Putnam, Conn.....	6,667	Scranton, Pa.....	102,026
Quincy, Ill.....	36,252	Seattle, Wash.....	80,671
Quincy, Mass.....	23,899	Sedalia, Mo.....	15,231
Racine, Wis.....	29,102	Selma, Ala.....	8,713

Incorporated Places Having 5,000 Inhabitants or More

Continued

Seneca Falls, N. Y..	6,519	Torrington, Conn....	8,360
Seymour, Ind.....	6,445	Traverse City, Mich.	9,407
Shamokin, Pa.....	18,202	Trenton, Mo.....	5,396
Sharon, Pa.....	8,916	Trenton, N. J.....	73,307
Sharpsburg, Pa.....	6,842	Trinidad, Col.....	5,345
Sheboygan, Wis.....	22,962	Troy, N. Y.....	60,651
Shelbyville, Ind.....	7,169	Troy, Ohio.....	5,881
Shenandoah, Pa.....	20,321	Tucson, Ariz.....	7,531
Sherman, Tex.....	10,243	Tuscaloosa, Ala.....	5,094
Shreveport, La.....	16,013	Tyler, Tex.....	8,069
Sidney, Ohio.....	5,688	Tyrone, Pa.....	5,847
Sioux City, Iowa....	33,111	Union, N. J.....	15,187
Sioux Falls, S. Dak..	10,266	Union, S. C.....	5,400
Somersworth, N. H..	7,023	Uniontown, Pa.....	7,344
Somerville, Mass....	61,643	Urbana, Ill.....	5,728
South Amboy, N. J..	6,349	Urbana, Ohio.....	6,808
South Bend, Ind.....	35,999	Utica, N. Y.....	56,383
South Bethlehem, Pa.	13,241	Valdosta, Ga.....	5,613
S. Norwalk, Conn....	6,591	Vallejo, Cal.....	7,965
South Omaha, Neb..	26,001	Valparaiso, Ind.....	6,280
South Portland, Me.	6,287	Van Wert, Ohio....	6,422
Spartansburg, S. C..	11,395	Vicksburg, Miss....	14,834
Spokane, Wash.....	36,848	Vincennes, Ind.....	10,249
Springfield, Ill.....	34,159	Wabash, Ind.....	8,618
Springfield, Mass....	62,059	Waco, Tex.....	20,686
Springfield, Mo.....	23,267	Walla Walla, Wash.	10,049
Springfield, Ohio....	38,253	Wallingford, Conn..	6,737
Spring Valley, Ill....	6,214	Waltham, Mass.....	23,481
Stamford, Conn.....	15,997	Warren, Ohio.....	8,529
Staunton, Va.....	7,289	Warren, Pa.....	8,043
Steelton, Pa.....	12,086	Washington, D. C...	278,718
Stirling, Ill.....	6,309	Washington, Ind....	8,551
Steubenville, Ohio...	14,349	Washington, Pa.....	7,670
Stevens Point, Wis..	9,524	Washington C. H., O.	5,751
Stillwater, Minn....	12,318	Waterbury, Conn....	45,859
Stockton, Cal.....	17,506	Waterloo, Iowa....	12,580
Streator, Ill.....	14,079	Watertown, N. Y...	21,696
Summit, N. J.....	5,302	Watertown, Wis....	8,437
Sumter, S. C.....	5,673	Waterville, Me.....	9,477
Sunbury, Pa.....	9,810	Watervliet, N. Y...	14,321
Superior, Wis.....	31,091	Waukegan, Ill.....	9,426
Syracuse, N. Y.....	108,374	Waukesha, Wis.....	7,419
Tacoma, Wash.....	37,714	Wausau, Wis.....	12,354
Talladega, Ala.....	5,056	Waycross, Ga.....	5,919
Tamaqua, Pa.....	7,267	Waynesboro, Pa....	5,396
Tampa, Fla.....	15,839	Webb City, Mo.....	9,201
Tarentum, Pa.....	5,472	Wellston, Ohio....	8,045
Taunton, Mass.....	31,036	Wellsville, Ohio....	6,146
Temple, Tex.....	7,065	W. Bay City, Mich.	13,119
Terre Haute, Ind....	36,673	Westbrook, Me.....	7,283
Terrell, Tex.....	6,330	West Chester, Pa....	9,524
Texarkana, Tex.....	5,256	West Haven, Conn..	5,247
Thomasville, Ga.....	5,322	West Hoboken, N. J.	23,094
Tiffin, Ohio.....	10,989	W. New York, N. J.	5,267
Titusville, Pa.....	8,244	West Orange, N. J..	6,889
Toledo, Ohio.....	131,822	West Pittston, Pa..	5,846
Tonawanda, N. Y....	7,421	Wheeling, W. Va....	38,878
Topeka, Kan.....	33,608	White Plains, N. Y..	7,899

**Incorporated Places Having 5,000 Inhabitants or More
Concluded**

Wichita, Kan.....	24,671	Woburn, Mass.....	14,254
Wilkesbarre, Pa.....	51,721	Woonsocket, R. I....	28,204
Wilkinsburg, Pa.....	11,886	Wooster, Ohio.....	6,063
Williamsport, Pa.....	28,757	Worcester, Mass....	118,421
Willimantic, Conn...	8,937	Wyandotte, Kan....	5,183
Wilmington, Del....	76,508	Xenia, Ohio.....	8,696
Wilmington, N. C....	20,976	Yonkers, N. Y.....	47,931
Winchester, Ky.....	5,964	York, Neb.....	5,132
Winchester, Va.....	5,161	York, Pa.....	33,708
Winfield, Kan.....	5,554	Youngstown, Ohio...	44,885
Winona, Minn.....	19,714	Ypsilanti, Mich.....	7,378
Winsted, Conn.....	6,804	Zanesville, Ohio.....	23,538
Winston-Sa'm, N. C.	13,650		

**DISTANCES FROM NEW YORK AND THE TIME IT
TAKES LETTERS TO REACH THEIR DES-
TINATION IN DIFFERENT PARTS
OF THE WORLD.**

To—	Miles.	Days.
Adelaide, via San Francisco.....	12,845	34
Alexandria, via London.....	6,150	15
Amsterdam, via London.....	3,985	10
Athens, via London.....	5,655	14
Bahia, Brazil	5,870	21
Berlin, via London.....	4,385	10
Bombay, via London.....	9,765	27
Buenos Ayres	8,045	29
Calcutta, via London.....	11,120	30
Cape Town, via London.....	11,245	30
Constantinople, via London.....	5,810	13
Florence, via London.....	4,800	11
Glasgow	3,375	10
Greytown, via New Orleans.....	2,810	7
Halifax, N. S.....	645	2
Havana, Cuba	1,400	3
Hong Kong, China, via San Francisco....	10,590	31
Honolulu, Sandwich Islands, via San Fran- cisco	5,645	13
Liverpool, England	3,540	8
London, via Queenstown.....	3,740	9
Madrid, via London.....	4,925	11
Melbourne, Australia, via San Francisco..	12,265	32
Mexico City by railroad.....	3,750	-7

To—	Miles.	Days.
Panama	2,355	8
Paris	4,020	8
Rio de Janeiro.....	6,730	23
Rome, via London.....	5,030	11
St. Petersburg, via London.....	5,370	12
Shanghai, via San Francisco.....	9,920	25
Stockholm, via London.....	4,975	12
Sydney, via San Francisco.....	11,570	31
Valparaiso, via Panama.....	5,910	37
Vienna, via London.....	4,740	12
Yokohama, via San Francisco.....	8,725	20

POSTAL DISTANCES AND TIME BETWEEN NEW YORK AND OTHER CITIES OF THE UNITED STATES.

The distances by the shortest routes and the time by the fastest trains between New York city and the points indicated are given by the Official Postal Guide as follows:

■ Cities in United States.	Miles.	Hours.
Albany, N. Y.....	142	3½
Atlanta, Ga.....	882	24¼
Baltimore, Md.....	188	6
Binghamton, N. Y.....	207	5½
Bismarck, N. Dak.....	1,738	60½
Boise, Idaho.....	2,736	92½
Boston, Mass.....	217	7
Buffalo, N. Y.....	410	9½
Cape May, N. J.....	172	5
Carson City, Nev.....	3,036	109¼
Charleston, S. C.....	804	21¼
Chattanooga, Tenn.....	853	32
Cheyenne, Wyo.....	1,899	54
Chicago, Ill.....	900	23
Cincinnati, Ohio.....	744	23
Cleveland, Ohio.....	568	19½
Columbus, Ohio.....	624	20
Concord, N. H.....	292	9½
Deadwood, S. Dak.....	1,975	65½

Cities in United States.	Miles.	Hours
Denver, Colo.....	1,930	61½
Des Moines, Iowa.....	1,257	37½
Detroit, Mich.....	743	21
Galveston, Tex.....	1,789	56½
Harrisburg, Pa.....	182	6
Hartford, Conn.....	112	4
Helena, Mont.....	2,423	89
Hot Springs, Ark.....	1,367	55
Indianapolis, Ind.....	808	23
Jacksonville, Fla.....	1,077	32
Kansas City, Mo.....	1,302	38¼
Louisville, Ky.....	854	30
Memphis, Tenn.....	1,163	40
Milwaukee, Wis.....	985	29¼
Montgomery, Ala.....	1,057	30½
Montpelier, Vt.....	327	10¼
New Orleans, La.....	1,344	40
Omaha, Neb.....	1,383	43
Philadelphia, Pa.....	90	3
Pittsburg, Pa.....	431	13
Portland, Me.....	325	12
Portland, Ore.....	3,181	114½
Prescott, Ariz.....	2,724	94
Providence, R. I.....	189	6
Richmond, Va.....	344	11¼
St. Louis, Mo.....	1,048	29
St. Paul, Minn.....	1,300	37
Salt Lake City, Utah.....	2,452	71½
San Francisco, Cal.....	3,250	106
Santa Fe, N. Mex.....	2,173	82
Savannah, Ga.....	905	26
Scranton, Pa.....	146	4½
Tacoma, Wash.....	3,209	102
Topeka, Kan.....	1,370	43
Vicksburg, Miss.....	1,288	50
Vinita, Ind. T.....	1,412	42
Washington, D. C.....	228	6½
Wheeling, W. Va.....	496	14¼
Wilmington, Del.....	117	5
Wilmington, N. C.....	593	20

Qualifications for Suffrage, Voting, Etc.

Requirements for Citizenship and for Voting

States	Requirements as to Citizenship	Residence in		
		State	County	Precinct
Alabama.....a	Citizen or declared intent.	1 year	3 mo.	1 mo.
Arkansas.....c	Citizen or declared intent.	1 year	6 mo.	1 mo.
California..h, s, a	Actual citizens.....	1 year	90 days	30 days
Colorado.....b	Citizen or declared intent.	6 mo.	90 days	10 days
Connecticut...a	Actual citizens.....	1 year	6 mo.	6 mo.
Delaware.....a	Actual county taxpayers.	1 year	3 mo.	.....
Florida.....b	Citizen.....	1 year	6 mo.	.....
Georgia.....a	Actual citizens.....	1 year	6 mo.	.....
Idaho.....*a	Actual citizens.....	6 mo.	30 days	.....
Illinois.....a	Actual citizens.....	1 year	90 days	30 days
Indiana.....e	Citizen or declared intent.	6 mo.	60 days	30 days
Iowa.....d	Actual citizens.....	6 mo.	60 days	10 days
Kansas.....d	Citizen or declared intent.	6 mo.	30 days	30 days
Louisiana...o, a	Actual citizens.....	1 year	6 mo.	60 days
Maine.....a	Citizen.....	2 years	1 year	6 mo.
Maryland.....b	Actual citizens.....	3 mo.	3 mo.	3 mo.
Massachusetts a	Actual citizens.....	1 year	6 mo.	1 day
Michigan.....a	Citizens.....	1 year	6 mo.	6 mo.
Minnesota...a	Citizen or declared intent.	6 mo.	20 days	20 days
Mississippi..ll, b	Citizen.....	3 mo.	.....	30 days
Missouri.....b	Actual citizens.....	2 years	1 year	1 yr.
Montana.....a	Citizen or declared intent.	1 year	60 days	60 days
Nebraska.....a	Citizens.....	1 year	30 days	30 days
Nevada.....b	Citizen or declared intent.	6 mo.	40 days	10 days
N. Hampshire..e	Citizen or declared intent.	6 mo.	30 days	30 days
New Jersey...a	Actual citizens.....	6 mo.	6 mo.	6 mo.
New York.....d	Actual citizens.....	1 year	5 mo.	.....
N. Carolina..o, b	Actual citizens.....	1 year	4 mo.	30 days
North Dakota..d	Actual citizens.....	1 year	90 days	.....
Ohio.....d	Citizen or declared intent.	1 year	6 mo.	90 days
Oklahoma.....d	Actual citizens.....	1 year	30 days	30 days
Oregon.....e	Citizen or declared intent.	6 mo.	20 days	30 days
Pennsylvania..b	Actual citizens.....	1 year	.....	2 mo.
Rhode Island..a	Actual citizens.....	2 years	.....	6 mo.
South Carolina.b	Actual citizens.....	2 years	1 year	4 mo.
South Dakota..a	Citizen or declared intent.	6 mo.	30 days	10 days
Tennessee.....d	Actual citizens.....	1 year	6 mo.	.....
Texas.....c	Citizen or declared intent.	1 year	6 mo.	6 mo.
Utah.....b	Citizen.....	1 year	4 mo.	60 days
Vermont.....a	Actual citizens.....	1 year	.....	.....
Virginia.....a	Actual citizens.....	1 year	.....	3 mo.
Washington...a	Citizen or declared intent.	1 year	90 days	30 days
West Virginia..c	Actual citizens.....	1 year	60 days	.....
Wisconsin.....d	Citizen or declared intent.	1 year	1 year	10 days
Wyoming.....a	Citizen.....	1 year	60 days	60 days
Arizona.....x	Citizen or declared intent.	6 mo.	10 days	10 days
Indian Terr...*	Citizen or declared intent.	1 year	6 mo.	1 mo.
Oklahoma...d, r	Citizen or declared intent.	6 mo.	60 days in township	30 days

(a) Registration required by law. (b) Required by constitution. (c) Prohibited by constitution. (d) Required in large cities. (e) No registration required. (x) Mayor and City council have power to require registration. (o) Educational qualification (read the constitution in the English lan-

guage), or own property assessed for not less than \$300, or voter on Jan. 1, 1866, or descendant of such voter, or a foreigner naturalized prior to Jan. 1, 1898. (*) Citizen 90 days before election. (*) Bigamists disqualified. (z) Natives of China disqualified. (.) Educational qualification by which voter is required to read and understand constitution. (r) Women may vote at school elections.

In Colorado, Idaho, Utah and Wyoming women are entitled to full suffrage, having the same rights to vote as men. Women are entitled to vote at school elections in Connecticut, Illinois, Iowa, Kentucky, Massachusetts, Minnesota, Montana, Nebraska, New Jersey, New York, North Dakota, Ohio, Oregon, South Dakota, Vermont, Washington, Wisconsin and Kansas.

TABLES OF INTEREST, DISCOUNT, ETC.

INTEREST.

Interest is commonly defined to be a compensation for the use of money or value, though literally it is the use of money.

The amount received or paid for interest is usually a percentage on the amount used, and is either fixed by contract or by statute. Per cent signifies by the hundred and implies, in interest, so many cents on the hundred cents, or so many dollars on the hundred dollars, etc. The usual custom is to reckon interest by the year, but it is better to express the time in the note or other instrument, as it is not necessarily understood. The following simple rule for calculating interest at 6 per cent will be of assistance.

Call every year .06, every two months .01, every six days .001, and any less days sixths of one mill; then to ascertain the interest:

Rule.—Multiply the principal by the rate per cent expressed decimally; or, cut off two figures from the right of dollars in the principal by a decimal point, and the result will be the interest for 60 days; then multiply this result by one-half the number of months required, to which add for days that proportion of the interest for 60 days, which the given number of days is of 60.

Interest Rules.—To find the interest on any sum at 3, 4, 5, 6, 7½, and 10 per cent for one month:

At 3 per cent remove the decimal point two places to the left, divide by 4 and the quotient will be the interest for one month.

At 4 per cent remove the decimal point two places

to the left, divide by 3 and the quotient will be the interest for one month.

At 5 per cent remove the decimal point one place to the left, divide by 24 and the quotient will be the interest for one month.

At 6 per cent remove the decimal point two places to the left, divide by 2 and the quotient will be the interest for one month.

At $7\frac{1}{2}$ per cent remove the decimal point one place to the left, divide by 16 and the quotient will be the interest for one month.

At 8 per cent remove the decimal point one place to the left, divide by 15 and the quotient will be the interest for one month.

At 10 per cent remove the decimal point one place to the left, divide by 12 and the quotient will be the interest for one month.

The following rules are in general use among business men, and may prove of assistance in calculating interest:

Rule.—Multiply the amount of the note or other instrument by the number of days before it becomes due, point off the right-hand figure and divide by the numbers stated in the following table:

4 per cent divide by.... 9	10 per cent divide by...36
5 per cent divide by....72	12 per cent divide by... 3
6 per cent divide by.... 6	15 per cent divide by...24
8 per cent divide by....45	18 per cent divide by... 2
9 per cent divide by.... 4	20 per cent divide by...18

The rule for casting interest, when the partial payments have been made, is to apply the payment, in the first place, to the discharge of the interest then due. If the payment exceeds the interest, the surplus goes towards discharging the principal, and the subsequent interest is to be computed on the balance of the principal remaining due. If the payment is less than the interest, the surplus of interest must not be taken to augment the principal; but interest continues on former principal until the period when the payments, taken together, exceed the interest due, and then the surplus is to be applied towards discharging the principal, and interest is to be computed on the balance.

Interest Laws and Statutes of Limitations

States and Territories	Interest Laws		Statutes of Limitations		
	Legal Rate	Rate Allowed by Contract	Judgments, Years	Notes, Years	Open Accounts, Years
	Per cent	Per cent			
Alabama.....	8	8	20	6*	3
Arkansas.....	6	10	10	5	3
Arizona.....	6	Any rate	6	4	3
California.....	7	Any rate	5	5†	2
Colorado.....	8	Any rate	20	6	6
Connecticut.....	6	6	20	(e)	6
Delaware.....	6	6	10	6||	3
District of Columbia.....	6	10	12	3	3
Florida.....	8	10	20	5	2
Georgia.....	7	8	7	6||	4
Idaho.....	10	12	6	5	4
Illinois.....	5	7	20	10	5
Indiana.....	6	8	20	10	6
Iowa.....	6	8	20(d)	10	5
Kansas.....	6	10	5	5	3
Kentucky.....	6	6	15	15	5(a)
Louisiana.....	5	8	10	5	3
Maine.....	6	Any rate	20	6(c)	6§§
Maryland.....	6	6	12	3	3
Massachusetts.....	6	Any rate	20	6	6
Michigan.....	5	7	6*	6	6§§
Minnesota.....	6	10	10	6	6
Mississippi.....	6	10	7	6	3
Missouri.....	6	8	10	10	5
Montana.....	8	Any rate	10(b)	8	5
Nebraska.....	7	10	5††	5	4
Nevada.....	7	Any rate	6	4	4
New Hampshire.....	6	6	20	6	6
New Jersey.....	6	6	20	6	6
New Mexico.....	6	12	7	6	4
New York.....	6	6††	20(n)	6	6§§
North Carolina.....	6	6	10	3*	3
North Dakota.....	7	12	10	6	6§§
Ohio.....	6	8	15	15	6
Oklahoma.....	6	12	5(h)	5	3
Oregon.....	6	10	10	6	6
Pennsylvania.....	6	6	5(f)	6||	6
Rhode Island.....	6§	Any rate	20	6	6
South Carolina.....	7	8	20	6	6
South Dakota.....	7	12	10(z)	6	6
Tennessee.....	6	6	10	6	6
Texas.....	6	10	10††	4	2
Utah.....	8	Any rate	8	6	4
Vermont.....	6	6	8	6	6§§
Virginia.....	6	6	20	5*	2*||
Washington.....	6	12	6	6	3
West Virginia.....	6	Any rate	(o)	10	5
Wisconsin.....	6	10	20(i)	6	6
Wyoming.....	8	12	5(k)	5	8

*Under seal, 10 years. †If made in State; if outside, 2 years. §Unless a different rate is expressly stipulated. ||Under seal, 20 years. ¶Store accounts; other accounts 3 years; accounts between merchants 5 years.

††New York has by a recent law legalized any rate of interest on call loans of \$5,000 or upward, on collateral security. ††Becomes dormant, but may be revived. §§Six years from last item. (a) Accounts between merchants 2 years. (b) In courts not of record 5 years. (c) Witnessed 20 years. (d) Twenty years in Courts of Record; in Justice's Court 10 years. (e) Negotiable notes 6 years, non-negotiable 15 years. (f) Ceases to be a lien after that period. (h) On foreign judgments 1 year. (i) Is a lien on real estate for only 10 years. (k) And indefinitely by having execution issue every five years. (l) Ten years foreign, 20 years domestic. (n) Not of record 6 years. (o) Kept alive by execution every 2 years.

"LIGHTNING METHOD" FOR CALCULATING INTEREST.

WHERE THE TIME IS FOR DAYS ONLY.

Rule.—To find the interest on any given sum for any number of days, multiply the principal by the number of days, then point off two places and divide as follows:

At 5 per cent	divide by 72
At 6 per cent	divide by 60
At 7 per cent	divide by 52
At 8 per cent	divide by 45
At 9 per cent	divide by 40
At 10 per cent	divide by 36
At 12 per cent	divide by 30

Example: What is the interest on \$900.00 for 8 days at 6 per cent?

Solution: $900 \times 8 \div 60 = \$1.20$ interest.

BANKERS' METHOD OF CALCULATING INTEREST.

In banking nearly all the business is transacted on the basis of 30, 60, and 90 days.

Rule.—To find the interest on any amount at 60 days, remove the decimal point two places to the left, and you have the interest at 6 per cent.

Increase or diminish according as the time is increased or diminished.

For 90 days add $\frac{1}{2}$ of itself; for 30 days divide by 2; for 15 days divide by 4; for 120 days multiply by 2.

Example: What is the interest on \$240 for 90 days at 6 per cent?

2.40 interest for 60 days.

1.20 interest for $\frac{1}{2}$ of 60 days, or 30 days.

3.60 interest for 90 days.

WHEN THE TIME CONSISTS OF YEARS, MONTHS,
AND DAYS.

Rule.—Reduce years to months, adding the number of months, then place $\frac{1}{3}$ of the number of days to the right of the months with a decimal point between.

Then remove the decimal point two places to the left in the principal, and divide by 2 and the result will equal the interest for one month at 6 per cent.

Multiply the interest for one month by the number of months, and the product is the interest at 6 per cent for the given time.

Then add 1-6 of itself for 7 per cent
 Then add 1-3 of itself for 8 per cent
 Then add 1-2 of itself for 9 per cent
 Then add 2-3 of itself for 10 per cent
 Subtract 1-6 of itself for 5 per cent
 Subtract 1-3 of itself for 4 per cent

Example: Find the interest on \$150, at 9 per cent, for 1 year, 4 months, and 12 days:

Solution: $\$1.50 \div 2 = .75$ interest for 1 month, 1 year, 4 months, and 12 days — 16.4 months.

$.75 \times 16.4 = \$12.30$, interest at 6 per cent

$12.30 + 6.15 = \$18.45$, interest at 9 per cent

N. B.—The \$6.15 is one-half of \$12.30.

TIME AT WHICH MONEY DOUBLES AT INTEREST.

Rate Per Cent.	Simple Interest.	Compound Interest.
2.....	50 years.	35 years 1 day.
2½.....	40 years.	28 years 26 days.
3.....	33 years 4 months.	23 years 164 days.
3½.....	28 years 208 days.	20 years 54 days.
4.....	25 years.	17 years 246 days.
4½.....	22 years 81 days.	15 years 273 days.
5.....	20 years.	15 years 75 days.
6.....	16 years 8 months.	12 years 327 days.
7.....	14 years 104 days.	10 years 89 days.
8.....	12½ years.	9 years 2 days.
9.....	11 years 40 days.	8 years 16 days.
10.....	10 years.	7 years 100 days.

HOW MONEY GROWS AT INTEREST.

If one dollar be invested and the interest added to the principal annually, at the rates named, we shall have the following result as the accumulation of one hundred years:

One dollar, 100 years at 1 per cent, \$2¾;	
2 per cent.....	\$7¼
One dollar, 100 years at 3 per cent, \$19¼;	
4 per cent.....	50½
One dollar, 100 years at 5 per cent.....	131½
One dollar, 100 years at 6 per cent.....	340
One dollar, 100 years at 7 per cent.....	868
One dollar, 100 years at 8 per cent.....	2,203
One dollar, 100 years at 9 per cent.....	5,513
One dollar, 100 years at 10 per cent.....	13,809
One dollar, 100 years at 12 per cent.....	84,675
One dollar, 100 years at 15 per cent.....	1,174,405
One dollar, 100 years at 18 per cent.....	15,145,000
One dollar, 100 years at 24 per cent.....	2,551,799,404

INTEREST LAWS OF THE UNITED STATES, SHOWING DAYS OF GRACE

The following data give the state, penalty of usury, legal rate, maximum rate permitted, and whether days of grace are allowed on sight, demand and time negotiable instruments.

Alabama.—All interest forfeited; legal and maximum rates, 8 per cent; grace on all negotiable papers.

Alaska.—Forfeiture of double interest 8 per cent; 12 per cent; grace on time paper only.

Arizona.—No penalty; 6 per cent; no limit; no grace.

Arkansas.—Principal and interest forfeited; 6 per cent; 10 per cent; days of grace on all negotiable papers.

California.—No penalty; 7 per cent; no limit; no grace.

Colorado.—No penalty; 8 per cent; no limit; no grace.

Connecticut.—All interest over 6 per cent forfeited; 6 per cent; 6 per cent; no grace.

Delaware.—Forfeiture of a sum equal to the money lent; 6 per cent; 6 per cent; no grace.

District of Columbia.—All interest forfeited; 6 per cent; 10 per cent; no grace.

Florida.—All interest forfeited; 8 per cent; 10 per cent; no grace.

Georgia.—All interest over 8 per cent forfeited; 7 per cent; 8 per cent; grace on time paper only.

Idaho.—Interest and 10 per cent per annum of principal forfeited; 7 per cent; 12 per cent; no grace.

Illinois.—All interest forfeited; 5 per cent; 7 per cent; no grace.

Indiana.—All interest over 8 per cent forfeited; 6 per cent; 8 per cent; grace on sight and time instruments.

Indian Territory.—Principal and interest forfeited; 6 per cent; 10 per cent; grace on all negotiable papers.

Iowa.—Interest and 10 per cent per annum of principal forfeited; 6 per cent; 8 per cent; no grace.

Kansas.—Forfeiture of all interest in excess of 10 per cent, and also an amount equal to the excess contracted for; 6 per cent; 10 per cent; grace on time paper only.

Kentucky.—All interest over 6 per cent forfeited; 6 per cent; 6 per cent; grace on demand paper only; grace on sight and time papers.

Louisiana.—All interest forfeited; 5 per cent; 8 per cent; grace on time paper only.

Maine.—No penalty; 6 per cent; no limit; grace on sight paper only.

Maryland.—All interest over 6 per cent forfeited; 6 per cent; 6 per cent; no grace.

Massachusetts.—No penalty; 6 per cent; no limit; grace on sight paper only.

Michigan.—All interest forfeited; 5 per cent; 7 per cent; grace on sight and time instruments.

Minnesota.—All interest forfeited; 6 per cent; 10 per cent; grace on sight paper only.

Mississippi.—All interest forfeited; 6 per cent; 10 per cent; grace on all negotiable instruments.

Missouri.—All interest forfeited; 6 per cent; 8 per cent; grace on time paper only.

Montana.—No penalty; 8 per cent; no limit; no grace.

Nebraska.—All interest forfeited; 7 per cent; 10 per cent; grace on sight and time paper.

Nevada.—No penalty; 7 per cent; no limit; grace on demand and time paper.

New Hampshire.—Forfeiture of three times the excess interest charged; 6 per cent; 6 per cent; grace on sight paper only.

New Jersey.—All interest forfeited; 6 per cent; 6 per cent; no grace.

New Mexico.—Forfeiture of double the interest and fine of not less than \$25 and not over \$100; 6 per cent; 12 per cent; grace on all negotiable instruments.

New York.—Principal and interest forfeited; 6 per cent; 6 per cent; no grace.

North Carolina.—All interest forfeited; 6 per cent; 6 per cent; grace on sight and time paper.

North Dakota.—All interest forfeited; 7 per cent; 12 per cent; no grace.

Ohio.—Forfeiture of excess of interest; 6 per cent; 8 per cent; no grace.

Oklahoma.—All interest forfeited; 6 per cent; 12 per cent; grace on all negotiable instruments.

Oregon.—Principal and interest forfeited; 6 per cent; 10 per cent; no grace.

Pennsylvania.—Forfeiture of excess of interest; 6 per cent; 6 per cent; no grace.

Rhode Island.—No penalty; 6 per cent; no limit; grace on sight paper.

South Carolina.—All interest forfeited; 7 per cent; 8 per cent; grace on sight and time instruments.

South Dakota.—All interest forfeited; 7 per cent; 12 per cent; grace on all negotiable instruments.

Tennessee.—Forfeiture of excess of interest, and fine; 6 per cent; 6 per cent; no grace.

Texas.—All interest forfeited; 6 per cent; 10 per cent; grace on sight and time paper.

Utah.—No penalty; 8 per cent; no limit; no grace.

Vermont.—Forfeiture of excess of interest; 6 per cent; 6 per cent; no grace.

Virginia.—All interest forfeited; 6 per cent; 6 per cent; no grace.

Washington.—Forfeiture of excess of interest; 6 per cent; 12 per cent; no grace.

West Virginia.—All interest over 6 per cent forfeited; no grace.

Wisconsin.—All interest forfeited; 6 per cent; 10 per cent; no grace.

Wyoming.—All interest forfeited; 8 per cent; 12 per cent; grace on all negotiable instruments.

DISCOUNT.

Discount is an allowance made for the payment of money before it becomes due, and is either the interest on the debt for the time, which is called *true discount*, or upon such a sum as will amount to the face of the debt when due, which is called bank discount. It will be observed that by true discount the interest is considered due when the debt is due, but by bank or business discount it is considered due when the note is discounted.

ESTIMATING PROFITS.

In order to ascertain the profit received, it will be necessary to find the actual cost of the merchandise and then deduct the cost from the selling price, and the remainder will be the profit. There are various ways of estimating profits, and the following may be of assistance:

Rule.—Divide the gross sales by 1. (one dollar), plus the rate per cent of profit (as agreed upon), and the quotient will be present value or net cost of goods sold, then deduct net cost of goods sold from gross sales, and the remainder will be the profit.

This result may also be obtained by the use of aliquot percentages. One quantity or number is said to be an aliquot part of another when it is contained in or will divide the other an exact number of times without any remainder. An aliquot number or part is one that is not contained in or will not divide the other without a remainder.

Rule for ascertaining the divisor of aliquot parts of 100:

Rule.—Add the percentages named to 100, and then divide the sum thus obtained by the percentage given, and the dividend will be the number by which to divide the amount of sales to ascertain the profit.

Rule for ascertaining profits by aliquot percentages:

Rule.—Divide the total amount of sales by the divisor obtained, by the rule given above, and the quotient will be the profits on the sales; then to ascertain net cost subtract the profits from amount of sales, and the remainder will be net cost or present value.

The following table of aliquot parts of 100 has been obtained by following the rule given above, and will undoubtedly prove of assistance:

TABLE OF ALIQUOT PERCENTAGES OF 100.

1.	is the 1-100th,	divide by 101
1.25	is the 1-80th,	divide by 81
1.5625	is the 1-64th,	divide by 65
2.	is the 1-50th,	divide by 51
2.0833	is the 1-48th,	divide by 49
2.50	is the 1-40th,	divide by 41
3.125	is the 1-32nd,	divide by 33
4.	is the 1-25th,	divide by 26
5.	is the 1-20th,	divide by 21
6.25	is the 1-16th,	divide by 17
8.333	is the 1-12th,	divide by 13
10.	is the 1-10th,	divide by 11
12.50	is the 1-8th,	divide by 9
16.666	is the 1-6th,	divide by 7
20.	is the 1-5th,	divide by 6
25.	is the 1-4th,	divide by 5
33.333	is the 1-3rd,	divide by 4
50.	is the 1-2nd,	divide by 3

The aliquant process is similar to and is in reality nothing more or less than the old rule for ascertaining present value:

Rule.—Divide the amount of sales by 1. (one dollar), plus the rate per cent expressed decimally, and the quotient will be the present value or cost of the merchan-

dise; then to ascertain profits, it will be necessary to subtract the cost from the amount of sales, and the remainder will be the profits.

ALIQOT PARTS OF ONE DOLLAR.

50 cents equal.....	$\frac{1}{2}$ of one dollar
33 $\frac{1}{3}$ cents equal.....	$\frac{1}{3}$ of one dollar
25 cents equal.....	$\frac{1}{4}$ of one dollar
20 cents equal.....	$\frac{1}{5}$ of one dollar
16 $\frac{2}{3}$ cents equal.....	$\frac{1}{6}$ of one dollar
12 $\frac{1}{2}$ cents equal.....	$\frac{1}{8}$ of one dollar
10 cents equal.....	1-10 of one dollar
8 $\frac{1}{3}$ cents equal.....	1-12 of one dollar
6 $\frac{1}{4}$ cents equal.....	1-16 of one dollar
5 cents equal.....	1-20 of one dollar

ALIQOT PARTS OF A TON.

10 cwt. equal.....	$\frac{1}{2}$ of a ton
5 cwt. equal.....	$\frac{1}{4}$ of a ton
4 cwt. equal.....	$\frac{1}{5}$ of a ton
2 cwt., 2 qrs., equal.....	$\frac{1}{8}$ of a ton
2 cwt. equal.....	1-10 of a ton
1 cwt. equal.....	1-20 of a ton

ALIQOT PARTS OF A POUND AVOIRDUPOIS.

8 ounces equal.....	$\frac{1}{2}$ of a pound
4 ounces equal.....	$\frac{1}{4}$ of a pound
2 ounces equal.....	$\frac{1}{8}$ of a pound
1 ounce equals.....	1-16 of a pound

ALIQOT PARTS OF TIME.

6 months equal.....	$\frac{1}{2}$ of a year
4 months equal.....	$\frac{1}{3}$ of a year
3 months equal.....	$\frac{1}{4}$ of a year
2 months equal.....	$\frac{1}{6}$ of a year
1 $\frac{1}{2}$ months equal.....	$\frac{1}{8}$ of a year
1 $\frac{1}{3}$ months equal.....	1-9 of a year
1 month equals.....	1-12 of a year
15 days equal.....	$\frac{1}{2}$ of a month
10 days equal.....	$\frac{1}{3}$ of a month
6 days equal.....	$\frac{1}{6}$ of a month
3 days equal.....	1-10 of a month
2 days equal.....	1-15 of a month
1 day equals.....	1-30 of a month

COINS OF THE UNITED STATES

The coins at present in circulation in the United States may be classified as gold coins, silver dollars, subsidiary silver and minor coins. The gold coins are the double-eagle, the eagle, the half-eagle, and the quarter-eagle, weighing respectively 516, 258, 129, and $64\frac{1}{2}$ grains of standard gold; that is, of a mixture consisting of nine parts of pure gold to one part of copper. The pure gold in the eagle weighs, therefore, 232 2-10 grains. These coins are legal tender in unlimited quantities for twenty, ten, five and two and one-half dollars respectively, and they are minted free of charge for whoever brings metal to the mint of the requisite degree of fineness. For nearly half a century after the establishment of the first United States mint, in 1793, the eagle contained 270 grains of standard gold .916 2-3 fine, and the alloy consisted of silver and copper mixed. The change to our present system was authorized by the acts of June 28, 1834, and January 18, 1837. For a time also a seigniorage charge of one-fifth of one per cent was imposed, but this regulation was repealed by an act passed January 14, 1875.

Our subsidiary silver coins are the half-dollar, quarter-dollar and dime, weighing respectively 192.9, 96.45, 38.58 grains of standard, or 173.61, 86.805, 34.725 grains of pure silver. The amount of the issue was limited by the acts of July 14, 1875, and April 17, 1876, to about forty-two million dollars, the sum needed to retire the so-called fractional paper currency of that time. This limit has been increased from time to time by special legislation. These coins are legal tender to the amount of ten dollars only, and are redeemable at the treasury or any subtreasury of the United States in sums or multiples of twenty dollars. They are issued in like quantities for lawful money to any person desiring them, and delivered by the government free of charge. At one time half-dimes and three-cent pieces of silver were issued from the mint, but their coinage was ordered discontinued by the mint act of 1873.

The minor coins of the United States are a five-cent piece, weighing 77.16 grains, and made of a mix-

ture of copper and nickel in the proportion of 75 parts of the former to 25 parts of the latter; a one-cent coin weighing 48 grains, and consisting of a mixture of copper, tin, and zinc in the proportion of 95 parts of the former to 5 parts of the two latter materials. From 1873 to 1890 a three-cent coin of nickel and copper was also in circulation. These coins are legal tender to the amount of twenty-five cents only, are redeemable at any subtreasury in sums of twenty dollars or more, and are delivered free of charge in similar quantities to any person who is willing to pay lawful money for them. Their supply is regulated by the director of the mint, under the supervision of the Secretary of the Treasury, the purpose being to keep in circulation precisely the quantity which is actually needed for the commerce of the country.

RAPID CALCULATION

"LIGHTNING METHOD" OF MULTIPLICATION AND DIVISION.

To multiply by 125, divide by 8, and call it thousands, because 125 is $\frac{1}{8}$ of a thousand.

To multiply by $12\frac{1}{2}$, divide by 8; call it hundreds.

To multiply by $1\frac{1}{4}$, divide by 8; call it tens.

To multiply by $62\frac{1}{2}$, divide by 16, and call it thousands.

To multiply by $6\frac{1}{4}$, divide by 16, and call it hundreds.

To multiply by $31\frac{1}{4}$, divide by 32, and call it thousands.

To multiply by $333\frac{1}{3}$, divide by 3, and call it thousands.

To multiply by $33\frac{1}{3}$, divide by 3, and call it hundreds.

To multiply by $3\frac{1}{3}$, divide by 3 and call it tens.

To multiply by 50, divide by 2, and call it hundreds.

To multiply by $66\frac{2}{3}$, divide by 15, and call it thousands.

To multiply by $833\frac{1}{3}$, divide by 15, and call it ten thousands, by annexing four ciphers.

To multiply by $83\frac{1}{3}$, divide by 12, and call it thousands.

To multiply by $8\frac{1}{3}$, divide by 12, and call it hun-

dreds, because $8\frac{1}{3}$ is 1-12 of a hundred. The reason is similar in each case.

To multiply by $166\frac{2}{3}$, divide by 6, and call it thousands.

To multiply by $16\frac{2}{3}$, divide by 6, and call it hundreds.

To multiply by $1\frac{2}{3}$, divide by 6, and call it tens.

To multiply by $37\frac{1}{2}$, take $\frac{3}{8}$ of the number, and call it hundreds; $87\frac{1}{2}$, $\frac{7}{8}$ of the number, and call it hundreds, etc.

We simply reverse these methods to divide. To divide by 10,100, 1,000, etc., we remove the point one, two and three places to the left.

To divide by 25, remove the decimal point two places to the left, and multiply by 4.

Removing the point two places divides by one hundred; hence the quotient is four times too small; hence we remove the point two places, and multiply by 4.

To divide by $2\frac{1}{2}$, remove the point one place to the left, and multiply by 4.

To divide by 125, remove the point three places to the left, and multiply by 8.

To divide by $12\frac{1}{2}$, remove the point two places to the left, and multiply by 8.

To divide by $1\frac{1}{4}$, remove the point one point to the left, and multiply by 8. There are about $1\frac{1}{4}$ cubic feet in one bushel. Hence dividing the number of cubic feet by $1\frac{1}{4}$ gives the number of bushels nearly.

To divide by $133\frac{1}{3}$, remove the point three places to the left, then multiply by 3 and divide by 4.

To divide by $8\frac{1}{3}$, remove the point two places to the left, and multiply by 12.

CONTRACTIONS IN MULTIPLICATION.

To multiply by 25 add 2 ciphers and divide by 4.

To multiply by $33\frac{1}{3}$ add 2 ciphers and divide by 3.

To multiply by 125 add 3 ciphers and divide by 8.

To multiply by 175 add 2 ciphers and divide by 5, and multiply result by 7.

METRIC SYSTEM

The Metric System has been adopted by Mexico, Brazil, Chile, Peru, etc., and except Russia and Great Britain, where it is permissive, by all European nations. Various names of the preceding systems are, however, frequently used: In Germany, $\frac{1}{2}$ kilogram = 1 pound; in Switzerland, $\frac{2}{10}$ of a metre = 1 foot, etc. If the first letters of the prefixes *deka*, *hecto*, *kilo*, *myria*, from the Greek, and *deci*, *centi*, *mili*, from the Latin, are used in preference to our plain English, 10, 100, etc., it is best to employ capital letters for the multiples and small letters for the subdivisions, to avoid ambiguities in abbreviations: 1 dekametre or 10 metres = 1 Dm.; 1 decimetre or 1-10 of a metre = 1 dm.

The Metre, unit of length, is nearly the ten-millionth part of a quadrant of a meridian, of the distance between equator and pole. The International Standard Metre is, practically, nothing else but a length defined by the distance between two lines on a platinum-iridium bar at 0° Centigrade, deposited at the International Bureau of Weights and Measures, Paris, France.

The Litre, unit of capacity, is derived from the weight of one kilogram pure water at greatest density, a cube whose edge is one-tenth of a metre and, therefore, the one-thousandth part of a metric ton.

The Gram, unit of weight, is a cube of pure water at greatest density, whose edge is one-hundredth of a metre, and, therefore, the one-thousandth part of a kilogram, and the one-millionth part of a metric ton.

One silver dollar weighs 25 grams, 1 dime = $2\frac{1}{2}$ grams, 1 five-cent nickel = 5 grams.

The Metric System was legalized in the United States on July 28, 1866, when Congress enacted as follows:

"The tables in the schedule hereto annexed shall be recognized in the construction of contracts, and in all legal proceedings, as establishing, in terms of the weights and measures now in use in the United States, the equivalents of the weights and measures expressed therein in terms of the metric system, and the tables may lawfully be used for computing, determining, and

expressing in customary weights and measures the weights and measures of the metric system."

The following are tables of equivalents:

1 meter = 39.37 inches.	1 yd. = .9144 m.
1 kilometer = .62137 mile.	1 rod = 5.029 m.
1 sq. meter = 1.196 sq. yds.	1 mile = 1.6093 Km.
1 cu. meter = 1.308 cu. yds.	1 sq. yd. = .8361 sq. m.
1 Are = 119.6 sq. yds.	1 acre = 40.47 ares.
1 hectar = 2.471 acres.	1 sq. mile = 259 Ha.
1 liter = 1.0567 quarts.	1 cubic foot = 28.317 liters.
1 hektoliter = 2.8375 bu.	1 cubic yard = .7645 cu. m.
1 ster = .2759 cord.	1 liquid quart = .9465 liter.
1 gram = 15.432 grains,	1 bushel = .35243 Hl.
Troy.	1 lb. Troy = .37324 Kg.
1 kilogram = 2.2046 lb.	1 lb. Avoir. = .4536 Kg.
Avoir.	

The first column of equivalents gives the approximate legalized values, and contains most of the denominations in common use.

MARKING GOODS

RULE FOR MARKING GOODS TO MAKE SPECIFIC PROFITS.

In marking goods bought by the dozen to make a specific per cent of profit, the following will be of assistance:

To make $12\frac{1}{2}$ per cent, remove the decimal point and add one-sixteenth.

To make $16\frac{2}{3}$ per cent, remove the decimal point and add one-thirty-sixth.

To make $18\frac{3}{4}$ per cent, remove the decimal point and add one-ninety-sixth.

To make 20 per cent, remove the decimal point one place to the left.

To make 25 per cent, remove the decimal point and add one-twenty-fourth.

To make 26 per cent, remove the decimal point and add one-twenty-sixth.

To make 28 per cent, remove the decimal point and add one-fifteenth.

To make 30 per cent, remove the decimal point and add one-twelfth.

To make 32 per cent, remove the decimal point and add one-tenth.

To make $33\frac{1}{3}$ per cent, remove the decimal point and add one-ninth.

To make 35 per cent, remove the decimal point and add one-eighth.

To make $37\frac{1}{2}$ per cent, remove the decimal point and add one-seventh.

To make 40 per cent, remove the decimal point and add one-sixth.

To make 44 per cent, remove the decimal point and add one-fifth.

To make 50 per cent, remove the decimal point and add one-fourth.

To make 60 per cent, remove the decimal point and add one-third.

To make 80 per cent, remove the decimal point and add one-half.

INDEX

A

	Page
"A 1," DEFINITION OF.....	161
Abatement, Definition of.....	161
Abbreviations and arbitrary signs used in business..	175
Abridgement and compilation.....	74
Absolute endorsement, Definition of.....	161
Absorbed, Definition of.....	161
Account closed card.....	186
" Definition of.....	161
Accounting, Corporation.....	32
Accrued dividend, Definition of.....	161
Acknowledgement of deeds.....	60
Acknowledgements, Before whom taken.....	60
Acquittance, Definition of.....	161
Actual assets, Definition of.....	161
Adaptability of card systems.....	180
Adjustment bond, Definition of.....	161
" formulas.....	125
" mortgage, Definition of.....	161
Adjustments, Fire insurance.....	113
Advantages of card systems.....	180
" of vertical filing.....	212
Advertising	136
" Appropriations for.....	194
" copy, Preparation of.....	139
" Form of reference book for.....	195
" in the mail order business.....	117
" Method of keying.....	137
" Mediums to be used in.....	136
" necessary to success in mail order busi- ness	187

Advertising, Object of	137
" Rates and price schedule for.....	195
" Record of in the mail order business...	188
" Selection of medium for.....	190
" Size and price schedule for.....	195
" System and concentration in.....	198
" System for.....	194
Advertisement, Analysis of.....	143
" keyed, Results shown by.....	192
" Selling points of.....	145
Advertisements, Display of.....	139
" Kinds of.....	137
" Wording of.....	138
Advice, Business, by captains of industry.....	213
Afloat, Definition of.....	161
Agencies, Mercantile	104
Agency, Definition of.....	206
" Dissolution of.....	23
" Factor and broker.....	21
" How created.....	20
" Limited and unlimited.....	21
" Renunciation of.....	23
" Revocation of.....	23
" Special and general.....	21
" Termination of.....	23
Agent, Authority of.....	20
" Compensation of.....	22
" Liability of to his principal.....	22
" Liability of to the third party.....	22
" Subject to accounting.....	22
Aid, A mechanical, to memory.....	206
Alabama, Chattel mortgage laws of.....	50
" Exemption laws of.....	44
Alaska, Exemption laws of.....	44
Aliquot parts of a pound avoirdupois.....	272
" parts of a ton.....	272
" parts of one dollar.....	272

Aliquot parts of time.....	272
“ percentages of one hundred.....	271
Allocation, Definition of.....	161
All-round-price, Definition of.....	162
Analysis of the printed advertisement.....	143
Anker, Equivalent of an.....	229
Anti-boycotting and anti-blacklisting laws.....	78
Apothecaries' measure.....	236
Application for charter.....	25
Applications, patent.....	67
Appropriations for advertising.....	194
Arbitrage, Definition of.....	162
Arbitrary signs used in business.....	175
Architects' or builders' measure.....	237
Arizona, Chattel mortgage laws of.....	50
“ Exemption laws of.....	45
Arkansas, Chattel mortgage laws of.....	50
“ Eight-hour law of.....	79
“ Exemption laws of.....	45
Arrha, Definition of.....	162
Assessment, Definition of.....	162
Assets, Definition of.....	162
Assigning or subletting of lease.....	40
Associations, Building and loan.....	113
Aval, Definition of.....	162
Avoldupois measure.....	233

B

BACKING, DEFINITION OF.....	162
Balance sheet, Definition of.....	162
Ballooning, Definition of.....	162
Bank, Definition of.....	16
Banker's method of calculating interest.....	265
Banking, A system for.....	181
Bankruptcy law, The.....	63
Bankrupts, Duties of.....	63
“ Who may become.....	63

Banks and banking.....	16
" city, Card for.....	183
" different classes of.....	16
" of circulation.....	17
" of deposit.....	16
" of discount.....	17
" of exchange.....	17
" out of town, Card for.....	183
" Private	17
Bartlett, Adolphus C., Business advice by.....	218
Bear, Definition of.....	162
Bearing the market, Definition of.....	162
Bid and asked quotations, Definition of.....	162
Blanket mortgage, Definition of.....	162
Blind pool, Definition of.....	162
Block, Definition of.....	162
Board of trade, Definition of.....	162
Bond, Definition of.....	162
Bonded, Definition of.....	162
Bonus, Definition of.....	162
Book value, Definition of.....	162
Bookkeeping, Definition of.....	107
" Systems of.....	108
Books close, Definition of.....	162
" Closing set of.....	110
" open, Definition of.....	162
Borders.....	149
" Distinctive.....	143
Branch bank, Definition of.....	163
" stores, How distinguished in factory ship- ments.....	203
Bucket shop, Definition of.....	163
Bucketing of Stocks, Definition of.....	163
Budget, Definition of.....	163
Builders' measure.....	237
Building and loan associations.....	113
Bull, Definition of.....	163

Bulling the market, Definition of.....	163
Bureau of Corporations.....	65
" of Manufacturers.....	65
Business, Abbreviations and arbitrary signs used	
in.....	175, 179
" advice by Captains of Industry.....	213
" corporation, Definition of.....	24
" dictionary.....	161
" law	1
" Mail order.....	116
" methods	98
" tables	221
Business letters, Contents of.....	98, 99
" " Courtesy in.....	101
" " Elements of.....	98
" " Length of.....	101
" " Mechanical make-up of.....	98
" " Tact and tone in.....	99
Butler, Edward B., Business advice by.....	218
Butt, Equivalent of a.....	229
Buyer four, ten, twenty, etc., Definition of.....	163
By-bidder, Definition of.....	163
Buying back, Definition of.....	163
By-laws, Classification of.....	31
" Definition of.....	30, 163

C

CALCULATING INTEREST, BANKERS' METHOD OF.....	265
" " "Lightning Method" for.....	265
California, Chattel mortgage laws of.....	50
" Eight-hour law of.....	79
" Exemption laws of.....	41
Call, Definition of.....	163
" loan, Definition of.....	163
Called Bond, Definition of.....	163
Capacity cards, Use of, in factory shipments.....	204

Capital, Definition of.....	163
Capital stock, Definition of.....	26
Capitals, Rules for the use of.....	242
Captain of Industry, Definition of.....	136
Captains of Industry, Business advice by.....	213
Card, Account closed.....	186
" Corporation	184
" customers, Use of, in soliciting.....	206
" index, Use of in law office.....	220
" Inquiry	189
" Introduction	187
" Order	189
" record, Use of in correspondence.....	192
" system, Advantage of, in correspondence.....	193
" Trust company.....	185
" systems	180
" Adaptability of.....	180
" Advantages of.....	180
" Cost of maintaining.....	181
" How made.....	180
" Removal of useless matter in.....	181
" Use of.....	181
Cards, capacity, Use of in factory shipments.....	204
" special, Form of, for factory shipments.....	203
" Use of, in mail order business.....	190
Carnegie, Andrew, Business advice by.....	219
Carrier, Definition of	41
" delivery by	43
Carriers, Kinds of	41
" of passengers	43
" Private	41
" Public	41
Casualty insurance, Definition of.....	57
" Special forms of.....	38
Cases, law, How classified for record.....	209
Cash assets, Definition of	163
Catch lines, Stock.....	143

Cats and dogs, Definition of.....	163
Caveat, Nature of a patent.....	69
Certificates of stock	28
Charges forward, Definition of.....	163
" of carriers, Regulation of.....	42
Charter, Application for.....	25
" Corporation	24
Check, Definition of	13
" when designated "certified".....	13
Chicago check, Definition of.....	164
Circularizing, Short cut in	152
Circular letter of credit, Definition of.....	164
" measure	233
Circulating notes	18
Circularized names, Recording and filing of.....	188
Circulation, Definition of	164
Cities, One hundred largest.....	250
City trade, Working up.....	191
Classification of law cases for record.....	209
Classified bonds, Definition of	164
" stock, Definition of.....	164
Clearing Houses	20
Clips, Use of, in correspondence.....	193
Close corporation, Definition of.....	164
Closed for dividend, Definition of.....	164
Closing prices, Definition of.....	164
" set of books.....	110
Cloth measure	232
Codicil, Definition of.....	62
Coining rate or value, Definition of.....	164
Coins of the United States.....	273
Collateral loan, Definition of.....	164
" note, Definition of.....	164
Collections	105
" Specific application of rules of.....	106
Collection charge, Definition of.....	164
Colon, Rules for using.....	240

Colorado, Chattel mortgage laws of.....	51
" Eight-hour law of.....	79
" Exemption laws of.....	45
Colors affected by light.....	132
Color blending	132
Comma, Rules for using	240
Commerce and Labor, Department of.....	64
Commercial paper	9
Commitment, Definition of	164
Common carriers, duties of.....	41
" " liability of	43
" stock, Definition of.....	27
" Rights of owner.....	27
Community of interest, Definition of.....	164
Compensatory damages, Definition of.....	164
Composition, Definition of	164
" Distinctive	143
Compounding, Definition of.....	164
Connecticut, Chattel mortgage laws of.....	51
" Eight-hour law	79
" Exemption laws of.....	45
Conne, P. A., Business advice by.....	217
Concessionaire, Definition of	164
Consent of parties necessary to sale.....	6
Consideration not necessary in negotiable paper... ..	10
Consignment, Definition of	164
Consignee, Definition of.....	164
Consol, Definition of.....	164
Consolidated bond, Definition of.....	165
" mortgage, Definition of	165
Constant, Definition of.....	165
Construction account, Definition of.....	165
Continued bond, Definition of.....	165
Contract, Definition of.....	1
" Limitation of liability by.....	43
" of sale, How made.....	6
Contracts	1

Contracts, Classification and kinds of.....	3
“ Common rule regarding	1
“ Competency of parties.....	1
“ Elements necessary to.....	2
“ Interpretation and construction of.....	4
“ of married women.....	1
“ of persons	1
“ of sale	5
“ Parol	3
“ Performance of	4
“ Reasons making invalid.....	1
“ Rescinding of.....	5
“ Specialties	3
“ Specific performance of	5
“ of minors	2
“ under seal	3
Contractions in multiplication.....	275
Contribution, Definition of.....	165
Controlling company, Definition of.....	165
Converse, John H., Business advice by.....	219
Copying, Measure of	237
Copyright	71
“ Assignment of	74
“ Deposit of copies required for.....	72
“ Duration of	73
“ Fees for	72
“ Infringement of.....	74
“ Notice of	73
“ Printed title required to secure a.....	71
“ Remedies for violation of.....	75
“ Renewal of	73
“ Term of	73
“ Who may secure a.....	71
Corner, Definition of.....	165
Corn in the crib, Rule for measuring.....	278
Corporation accounting	32
“ bonds as an investment.....	113

Corporation card	184
" Charter	24
" Charter powers of a.....	25
" Definition of	23
" Sources of managerial authority of..	30
Corporations	23
Corporations, Bureau of	65
" classified in accounting.....	32
" Entries for class 1.....	32
" Entries for class 2.....	33
" Entries for class 3.....	33
" Government supervision of.....	31
Corrected proof	247
Correspondence	98
" file, Arrangement of.....	192
" System for	192
" Use of card record in.....	192
" Vertical filing of.....	154
Cost, Definition of	127
" How to ascertain	120
" of production	126
Costs	126
" Outline of the subject.....	126
" Systems of in use.....	130
Coupon bond, Definition of	165
" Definition of	165
Covenants, Express and implied.....	39
Credit information, Sources of.....	103
" man, Knowledge necessary to.....	103
Credits	102
Crossed check, Definition of.....	165
Cubic or solid measure.....	234
Cumulative stock, Definition of.....	165
" voting	31
Current assets, Definition of.....	165
" liabilities, Definition of.....	165
Customers called on, List of	191

Customer's card, Use of, in soliciting.....	206
Cuts, Kinds of	147
Cutthroat mortgage, Definition of.....	165

D.

DASH, RULES FOR USING.....	241
Dating, Definition of	165
Days of grace, table showing.....	26
Dead assets, Definition of.....	165
Deed file	210
Debenture, Definition of	166
Debit and Credit, Definitions of.....	108
Declaration of trust, Definition of.....	166
Deeds, Requisites of a valid.....	61
" Acknowledgment of.....	60
Deferred bond, Definition of.....	166
Delaware, Chattel mortgage laws of.....	51
" Exemption laws of.....	45
Delivery by carrier.....	43
Demurrage, Definition of	166
Department of Commerce and Labor.....	64
" paying teller's, An important feature of	185
Depreciation, Definition of	128
Dictation help, A	150
Differential rate, Definition of.....	166
Direct liabilities, Definition of.....	166
Discount, Definition of.....	270
Discussion, Definition of.....	166
Display of advertisements.....	139
Display of illustrations.....	148
Distances and time between New York and foreign cities, Postal	258
" and time between New York and other cities of the U. S., Postal.....	259
Distinctive borders and composition.....	143
" designs, piracy of	145

Distinctive window displays.....	133
District of Columbia, Chattel mortgage laws of....	51
" " " Eight-hour law of	79
" " " Exemption laws of.....	45
Dividend, Definition of	166
" off, Definition of.....	166
" on, Definition of	166
Divisional bond, Definition of.....	166
Dollar, Aliquot parts of.....	272
Domestic exchange, Definition of.....	166
" Money orders	96
" rates of postage.....	166
Domiciled, Definition of.....	166
Drafts, kinds of	13
Drawback, Definition of.....	166
Drawn bond, Definition of.....	166
Drawing paper, Sizes of.....	239
Duration of Copyright.....	73
Duties of bankrupts.....	63
" of common carriers.....	41

E

ELEMENTS OF A GOOD BUSINESS LETTER.....	98
" Those necessary to contracts.....	2
Employer, Liability of.....	8
Employer's unions	9
Employé's record	151
Envelope method, Use of, in law office.....	208
Envelopes, stamped	96
Equipment bond, Definition of.....	166
Equity, Definition of.....	166
Estimating profits	270
Estimates, How disposed of.....	128
Essentials to a valid sale.....	5
Eviction of tenant	40
Exchange, Definition of.....	166

Exclamation point, Rules for using.....	241
Ex-coupon, Definition of.....	166
Executed contracts	3
Executory contracts	3
Ex-dividend, Definition of.....	167
Ex-drawing, Definition of.....	167
Exemption laws	44
Ex-interest, Definition of	167
Expense account, Definition of.....	120
Express and implied covenants.....	39
Expressed contracts	3
Ex-rights, Definition of.....	167
Ex-ship, Definition of.....	167
Ex-Store, Definition of.....	167
Extended bond, Definition of.....	167
Extension bond, Definition of.....	167

F

FACTORY SHIPMENTS	201
Fiat money, Definition of.....	167
Fictitious or watered stock.....	28
File, Dead	210
Filing correspondence	154
" method in law office.....	210
" Numerical system of.....	211
" of invoices.....	155
" of want cards.....	198
Finance committee, Definition of.....	167
Financial statement, Definition of.....	167
Fire insurance adjustments	118
First-class mail matter.....	89
First mortgage, Definition of.....	167
Fiscal year, Definition of.....	167
Fixed capital, Definition of.....	167
" charge, Definition of.....	167
" charges, Definition of.....	128
" debt, Definition of.....	167

Floating, Definition of.....	167
" capital, Definition of.....	167
" debt, Definition of.....	167
" stock, Definition of.....	167
Florida, Chattel mortgage laws of.....	51
" Exemption laws of.....	45
Fluid measure	232
Folded sheets, Measure of.....	239
Forced loan, Definition of.....	167
Foreign exchange, Definition of.....	168
Form letter, Definition of.....	102
Formulas, Adjustment.....	125
Forwarding letters, Short cut in.....	151
Foul proof	246
Founder's Shares, Definition of.....	168
Fourth-class mail matter.....	93
Fraud, Effect of in life insurance.....	35
" Effect of in marine insurance.....	37
" on part of buyer.....	7
Frauds, Statute of.....	49
Fraudulent contracts	4
Free coinage, Definition of.....	168
Free overside, Definition of.....	168
Freight, Definition of.....	168
Fuel	130
Full paid stock.....	27
Full stock, Definition of.....	168
Funded debt, Definition of.....	168

G

GENERAL MORTGAGE, DEFINITION OF.....	168
Geographical tables.....	250
Georgia, Chattel mortgage laws of.....	51
" Exemption laws of.....	45
Gimbel, Isaac, Business advice by.....	217
Gold bonds, Definition of.....	168

Gold point, Definition of.....	168
“ reserve, Definition of.....	168
Goods and payment of carriage.....	41
“ Definition of.....	41
“ Marking	277
“ Right to refuse.....	42
Good will, Sale of.....	7
Government depository, Definition of.....	168
“ supervision of corporations.....	31
Gross cost, Definition of.....	119
“ earnings, Definition of.....	168
“ profit, Definition of.....	120
“ purchases, Definition of.....	119
“ sales, Definition of.....	120
“ stock, Definition of.....	120
Growth of mail order trade.....	187
Guaranteed bond, Definition of.....	168
Guaranteed stock	27
“ “ Definition of	168

H

HALF STOCK, DEFINITION OF.....	168
Holder for value.....	11
Holders of common stock, Rights of.....	29
Holding company, Definition of.....	168
How money grows at interest.....	267
Hypothecation, Definition of.....	168

I

IDAHO, CHATTEL MORTGAGE LAWS OF.....	52
“ Exemption laws of.....	45
“ Eight-hour law of.....	79
Illegal contracts	4
Illinois, Chattel mortgage laws of.....	52
“ Eight-hour law of.....	79
“ Exemption laws of.....	46
Illustrations, Display of.....	148
“ in newspaper advertising.....	147

Immoral contracts	4
Implied contracts	3
In bond, Definition of.....	168
Incorporated places, Population of.....	257
Incorporation, Advantages of.....	21
Indiana, Chattel mortgage laws of.....	51
" Eight-hour law of.....	86
" Exemption laws of.....	46
Indian Territory, Chattel mortgage laws of.....	56
" " Exemption laws of.....	46
Indorsed bond, Definition of.....	168
Indorsement, Kinds of.....	13
Indirect labor, Definition of.....	128
Infringement of copyright.....	74
Inhabitants of new insular possessions.....	89
Initialed check, Definition of.....	169
Inquiry card.....	189
Instant reference a feature of card systems.....	180
Instruments, Negotiable.....	9
Insular possessions, Inhabitants of.....	89
Insurable interest, Definition of.....	34
Insurance, Accident	38
" Credit	38
" Definition of.....	34
" Elevator	39
" Fidelity	38
" Fire	34
" Life	35
" Marine	37
" Plate glass.....	38
" policy, Cancellation of.....	35
" policy, Form of contract.....	35
" policy, Life, how worded.....	36
" Steam boiler.....	39
" Title	38
International Stock, Definition of.....	169

Interest, How money grows at.....	267
" laws and statutes of limitations.....	264
" Tables of.....	263
" Time at which money doubles at.....	266
Interim Dividend, Definition of.....	169
Interrogation point, Rules for using.....	241
Interstate commerce law.....	42
Introduction card.....	187
Inventors, Joint.....	67
Investment securities, Definition of.....	169
Investments	111
" Classes of.....	112
" Purchase	112
" Wildcat	114
Invoice filing.....	155
Iowa, Chattel mortgage laws of.....	52
" Eight-hour law of.....	80
" Exemption laws of.....	46
Iron-clad note, Definition of.....	169
Irredeemable bond, Definition of.....	169
" currency, Definition of.....	169
Irregularities in management of corporation.....	30
Issued and outstanding stock.....	26
Issue, Definition of.....	169

J

JOINT BOND, DEFINITION OF.....	169
" contracts	3
" Inventors	67
" mortgage, Definition of.....	169
" stock company, Definition of.....	169
Journalizing, Rules for.....	109
Judging the other man's letter.....	101
Judgment note, Definition of.....	169
Junk, Definition of.....	169

K

KANSAS, CHATTEL MORTGAGE LAWS OF.....	53
" Eight-hour law of.....	80
" Exemption laws of.....	46
Keith, Elbridge G., Business advice by.....	213
Kentucky, Chattel mortgage laws of.....	53
" Exemption laws of.....	46
Keying advertisements.....	137
Kinds of Agency.....	21
" of cuts.....	147
" of drafts.....	13
" of indorsement.....	13
Kiting, Definition of.....	169
Knocked down, Definition of.....	169

L

LABOR, DEFINITION OF.....	127
" legislation	78
Lacey, Edward S., Business advice by.....	214
Land grant mortgage, Definition of.....	169
" grant bond, Definition of.....	169
" or square measure.....	236
" Rule for measuring.....	280
Landlord and tenant.....	39
Law, Business.....	1
" office, A system for.....	208
" The bankruptcy.....	63
" Interstate commerce.....	42
Lawful contracts.....	4
Laws, Anti-boycotting and anti-blacklisting.....	78
" Eight-hour	79
" interest, Table of.....	264
" Naturalization	86
Leads and slugs.....	244
Lease, Assigning or subletting of.....	40
" Covenants of.....	39

Lease, Rights and Liabilities under.....	40
" When to be in writing.....	39
" Words of grant in.....	40
Leased line, Definition of.....	170
Legal holidays.....	75
Legislation, Labor.....	78
Length, Measures of.....	236
Letter forwarding, Short cut in.....	151
" postage, Rates of.....	89
" rates, On what charged	90
Letters, Disposition of, in file.....	193
" following draft.....	106
" Form	102
" How condensed in small space.....	194
" of recommendation.....	102
" Postage on should be prepared.....	90
" Returnable to sender.....	91
" Sealing of.....	151
" Where filed, in card system.....	193
Liability of carriers of passengers.....	43
" of corporation stockholders.....	26
" of common carriers.....	43
" Employer	8
" Principal	21
Life insurance policy, Form of.....	36
" " premiums, How graded.....	36
"Lightning method" for calculating interest.....	265
" " of multiplication and division..	274
Limitations, Statutes of.....	264
Limited liability, Definition of.....	170
Linear measure.....	236
Liquid assets, Definition of.....	170
Listed stocks, Definition of.....	170
List of customers called on.....	192
" of prospects in soliciting.....	205
Loan and trust companies, How organized.....	19

Massachusetts, Exemption laws of.....	46
Material, Definition of.....	128
Measure, Apothecaries'.....	237
" Architects' or builders'.....	232
" Avoirdupois	233
" Circular	233
" Cloth	237
" Copying	237
" Cubic or solid.....	234
" Dry	235
" Fluid	232
" Folded sheets.....	238
" Land or square.....	236
" Linear	236
" of unity.....	237
" Paper	237
" Shoemaker's	235
" Surveyor's long.....	235
" Surveyor's square.....	234
" Tables of.....	228
" Wine or liquid.....	229
" liquid, Reduction of to United States from English	229
" Miscellaneous	236
" Miscellaneous weights and.....	230
Medium, Selection of, for advertising.....	196
Meeting of the minds.....	2
Memory, A mechanical aid to.....	206
Mercantile agencies.....	104
Merger, Definition or.....	170
Metric system.....	276
Michigan, Chattel mortgage laws of.....	54
" Exemption laws of.....	46
Mileage, Definition of.....	170
Minors, Contracts of not absolutely void.....	2
Minnesota, Chattel mortgage laws of.....	54
" Eight-hour law of.....	80

Minnesota, Exemption laws of.....	46
Miscellaneous measures.....	236
Mississippi, Chattel mortgage laws of.....	54
" Exemption laws of.....	47
Missouri, Chattel mortgage laws of.....	54
" Eight-hour law of.....	80
" Exemption laws of.....	47
Mixing property.....	22
Money orders, Domestic.....	96
Money, Time required, to double at interest.....	226
Montana, Chattel mortgage laws of.....	54
" Eight-hour law of.....	80
" Exemption laws of.....	47
Mortgage, Definition of.....	170
Mortuary tables determined by average results....	36
Multiplication and Division, "Lightning method" of	274
" Contractions in.....	275
Municipal bond, Definition of.....	170

N

NAMES, CIRCULARIZED, RECORDING AND FILING OF.....	183
National Banks, Organization of.....	18
" " Powers of.....	18
" " Prohibitions of.....	19
" " Reserve required.....	19
Naturalization, Declaration of intention of.....	86
" laws	86
" of Chinese.....	88
" of minors.....	87
" of soldiers.....	87
Natural persons required to form a corporation....	25
Nebraska, Chattel mortgage laws of.....	55
" Eight-hour law of.....	81
" Exemption laws of.....	47
Necessities of life, Meaning of, in law.....	2
Negotiable instrument, Definition of.....	170

Negotiable instruments.....	9
" " Prerequisites necessary to negotiability	10
Net cash, Definition of.....	170
" Definition of.....	170
" cost, Definition of.....	119
" inventory, Definition of.....	120
" profit, Definition of.....	120
" purchases, Definition of.....	120
" stock, Definition of.....	120
Nevada, Chattel mortgage laws of.....	55
" Exemption laws of.....	47
New Hampshire, Chattel mortgage laws of.....	55
" Exemption laws of.....	47
New Jersey, Chattel mortgage laws of.....	55
" Eight-hour law of.....	81
" Exemption laws of.....	47
New Mexico, Chattel mortgage laws of.....	55
" Eight-hour law of.....	81
" Exemption laws of.....	47
Newspaper advertising, Illustrations in.....	147
New York, Chattel mortgage laws of.....	56
" Eight-hour law of.....	81
" Exemption laws of.....	47
Nominal assets, Definition of.....	170
Non-assented stock or bonds, Definition of.....	170
Non-assessable stock, Definition of.....	170
Non-cumulative stock, Definition of.....	170
Non-speculative accounts, Definition of.....	110
No protest, Definition of.....	170
North Carolina, Chattel mortgage laws of.....	56
" Exemption laws of.....	47
North Dakota, Chattel mortgage laws of.....	56
" Exemption laws of.....	48
Notes, Non-presentment of does not void.....	12
" Who may demand payment of.....	12
Notice of copyright.....	73

Notice to agent.....	23
" of death required in life insurance.....	37
" of loss necessary in insurance.....	35
Nude contract, Definition of.....	171
Numerical system of filing.....	211

O

OBLIGATORY BOND, DEFINITION OF.....	171
Ogilvie, George W., Business advice by.....	220
Ohio, Chattel mortgage laws of.....	56
" Eight-hour law of.....	81
" Exemption laws of.....	48
Oklahoma, Chattel mortgage laws of.....	57
" Eight-hour law of.....	81
" Exemption laws of.....	48
One hundred largest cities.....	250
Operating company, Definition of.....	171
Optional bond, Definition of.....	171
Option, Definition of.....	171
Oral contract in insurance.....	35
Oral contracts.....	3
Order card.....	189
Orders, How records are kept of.....	201
" Stop payment.....	185
" Work and stock.....	130
Ordinary prudence, Doctrine of.....	8
Oregon, Chattel mortgage laws of.....	57
" Eight-hour law of.....	81
" Exemption laws of.....	48
Overcapitalization, Definition of.....	171
Overcertification, Definition of.....	171
Overdraft, Definition of.....	171
Overhead price, Definition of.....	171
Overissue, Definition of.....	171
Overlying mortgage, Definition of.....	171
Ownership of record.....	29

P

PAPER, MEASURE OF.....	237
Par, Definition of.....	171
" list, Definition of.....	171
Parity, Definition of.....	171
Parent company, Definition of.....	171
Participating bond, Definition of.....	172
Parties to negotiable instruments.....	11
Partner, new, liability of.....	16
Partnership	14
" How dissolved.....	15
" Kinds of.....	14
" Nature and formation of.....	14
" Use of name in.....	15
" When in force.....	14
" Formation of.....	14
Partners, Authority of.....	16
" Individual debts of.....	16
" Kinds of.....	14
" Several, liability of.....	16
Partner's interest, Sale of.....	16
Passengers, Carriers of.....	43
Passing a dividend, Definition of.....	172
Passive bond, Definition of.....	172
Passport, Blank forms of application for.....	86
" Expiration of.....	85
" Fee for.....	86
" regulations of United States.....	83
" Woman's application for.....	84
Passports, Applications by native citizens for.....	83
" Applications by naturalized citizens for.....	84
" By whom and to whom issued.....	83
" for wife, minor children, and servants, Application for.....	85
Paid-up stock, Definition of.....	171
Paper profits, Definition of.....	171
Papers, How made negotiable.....	10

Patent Applications.....	67
" Assignment, Nature of.....	69
" Oath required in applying for.....	68
" office procedure.....	66
" Reissue of a.....	69
Patents, Drawings and models for.....	68
" Fees for.....	70
" Length of grant for.....	66
" When granted.....	69
Paying teller's department, An important feature of the	105
Pennsylvania, Chattel mortgage laws of.....	57
" Eight-hour law of.....	81
" Exemption laws of.....	48
Percentages, Aliquot, of one hundred.....	271
Period, Rules for using.....	240
Perpetual record of grades and prices.....	199
Phillips, Thomas P., Business advice by.....	215
Piecework, Record of time on.....	129
Pipe, Equivalent of a.....	229
Piracy of distinctive designs.....	145
Plant, Definition of.....	172
Plain bond, Definition of.....	172
Pointers, Use of, in correspondence.....	193
Policy, Life insurance, form of.....	36
" record, Value of.....	208
Pool, Definition of.....	172
Porto Rico, Eight-hour law of.....	82
Postage, Domestic rates of.....	89
Postal cards, Rates on.....	89
" distances and time between New York and foreign cities.....	258
" distances and time between New York and other cities of the United States.....	259
Postdated, Definition of.....	172
Potter, Edwin A., Business advice by.....	215
Pound, avoirdupois, Aliquot parts of a.....	272

Preferred stock, Definition of.....	27, 172
" " How differing from bonds.....	172
Premium, Definition of.....	172
Premiums, Life insurance, must be paid.....	36
Preparation of advertising copy.....	139
Present value, How to ascertain.....	121
Price, Definition of.....	6
" makers	111
Prices, Value of, in advertisements.....	138
Prime cost, Definition of.....	127
Principal or agent, Who may act as.....	20
" responsible for acts of agent.....	22
Printing, Tables of use in.....	244
Private Banks.....	17
" " Organization and functions of.....	17
" carriers	41
" mailing cards.....	90
Proceedings, summary.....	40
Produce, Tables for.....	278
Profit or loss in dollars and cents, to ascertain.....	122
" or loss, To ascertain per cent of.....	122
Profit, Place occupied by, in costs.....	129
" To ascertain per cent of.....	122
Profits, Estimating.....	270
" How shown by want cards.....	200
" specific, Marking goods to make.....	277
Promissory notes, Kinds of.....	10
Promoter's stock, Definition of.....	172
Proof, Corrected.....	247
" Foul	246
Proof-reading	245
" Marks used in.....	249
" of importance to advertiser.....	150
Property, Value of.....	119
Proposition and acceptance.....	2
Proprietary company, Definition of.....	172
Prospects, How record of is kept.....	207

Prospects, List of, in soliciting.....	205
Protest waived, Definition of.....	172
Protests	11
Proxy, Definition of.....	172
Public carriers	141
" securities	112
Publications, Second-class.....	92
" Special issues of.....	92
Punctuation marks and rules for using them.....	240
" " minor, Rules for using.....	242
Purchase investments.....	112
Purchases, How to ascertain.....	121
Put, Definition of.....	172

Q

QUALIFICATIONS FOR SUFFRAGE, VOTING, ETC.....	261
Quarter-stock, Definition of.....	172
Quick assets, Definition of.....	172
Quid, Definition of.....	172
Quotation, Definition of.....	172
" marks, Rules for using.....	241

R

RAPID CALCULATION	274
Rates of postage on transient publications.....	92
" " " to Republic of Panama.....	97
" " " to publishers.....	91
Real estate securities.....	112
Recommendation, Letters of.....	102
Record, Employé's.....	151
" of policies, Value of.....	208
" of prospects, How kept.....	207
Redeemable bond, Definition of.....	172
Redemption Drawing, Definition of.....	172
Registered bond, Definition of.....	173
" coupon bond, Definition of.....	173

Registered stock, Definition of.....	173
Registrar, Definition of.....	173
Registration of mail matter.....	95
Rehypothecation, Definition of.....	173
Reissue of patent.....	69
Released endorsed bond, Definition of.....	173
Relief signs.....	135
Reorganization, Definition of.....	173
Repairs, Definition of.....	128
Republic of Panama, Rates of postage to.....	97
Resources, Definition of.....	173
Restrictive endorsement, Definition of.....	173
Results shown by keyed ad.....	197
Rhode Island, Chattel mortgage laws of.....	57
" " Exemption laws of.....	48
Right, Definition of.....	173
" of suffrage.....	38
" to refuse goods.....	42
Rights and liabilities under lease.....	40
Risks, Ordinary and extraordinary.....	8
Routing, Change in, indicated on cards.....	202
" of orders, How handled.....	202
Rough draft, Use of, in advertising.....	139
Rule for ascertaining the number of bushels of apples, potatoes, etc., in a bin.....	278
" for estimating body type.....	244
Rules and maxims in commercial law.....	1
" for determining property loss.....	118
" for journalizing.....	109
" for the use of capitals.....	242
for spelling.....	243
Runlet, Equivalent of a.....	229

S

SAGE, RUSSELL, BUSINESS ADVICE BY.....	220
Sale, Definition of.....	5
" of Personal property.....	5

Sales at auction	7
" How affected by defects	6
" How to ascertain	121
" Record of, in mail order business.....	188
" Subject matter of	6
Salesmen's reports	104
Salvage, To ascertain, per cent of proportion of....	123
Savings banks	17
Scrap, Disposition of.....	130
Scrap, Definition of	123
Sealing letters, Short cut in.....	151
Seasoned securities, Definition of.....	173
Second-class mail matter.....	91
Securities company, Definition of.....	173
" Public	112
" Real estate	112
Seignorage, Definition of.....	173
Selfridge, Harry G., Business advice by.....	219
Seller four, ten, twenty, etc., Definition of.....	174
Seller's option, Definition of.....	174
Selling expense, Definition of.....	128
" price, Constituents of.....	127
Semicolon, Rules for using.....	240
Serial bonds, Definition of.....	174
Several contracts	3
Shipments, Factory	201
Shoemaker's measure	235
Short cuts	150
Shorthand	115
" Specimen of the Benn Pitman system of	115
Siegel, Henry, Business advice by.....	216
Sight draft as a means of collection.....	105
Sign, Requisite of a good.....	134
Signs	134
" Permanent	134

Signs, Quality of.....	136
“ Relief	135
“ Temporary	135
“ Window	135
Signature book, The, versus the card system.....	182
Single-name paper, Definition of.....	174
Sinking-fund bond, Definition of.....	174
“ Definition of	174
“ mortgage, Definition of.....	174
Sizes of drawing paper	238
“ type	149
Slow assets, Definition of.....	174
Smith, L. C., Business advice by.....	219
Sola, Definition of	174
Soliciting, System for.....	205
South Carolina, Chattel mortgage laws of.....	58
“ Exemption laws of.....	48
South Dakota, Chattel mortgage laws of.....	58
“ Exemption laws of.....	48
Sources of credit information.....	103
Special aid bond, Definition of	174
“ assessment bond, Definition of.....	174
“ cards, Form of for factory shipments....	203
Specific profits, Marking goods to make.....	277
Speculative accounts, Definition of.....	110
Spelling, Rules for	243
Square measure	236
State banks, How organized	18
State check, Definition of.....	174
Stamped envelopes	96
Standard time	239
State and national banks, comparison of.....	18
Statements, When to be rendered.....	105
Statutes of frauds	219
Statute of limitations, Table of.....	264
Stewart, Graeme, Business advice by.....	218
Stock catalogue, How formed by want cards.....	199

Stock catch lines.....	143
" certificates	28
" How to ascertain	121
" issued and outstanding	26
" Ownership of	30
Stockholder, Rights of management of.....	30
Stockholders	29
" Rights of	29
Stocks and bonds, Difference between.....	113
Stoppage in transit	6
Stop payment orders	185
Stores	129
" branch, How distinguished in factory ship- ments,	203
" Issue of	130
Striker, Definition of	8
Sub-agents	22
Sub-company, Definition of.....	174
Subscribers, When accounted stockholders.....	29
Subsidiary company, Definition of.....	174
Suffrage, Qualifications for	261
" Right of	88
Suicide may or may not void policy.....	36
Suit by one partner against another.....	15
Summary proceedings	40
Supervision of corporations by government.....	31
Surveyor's long measure.....	235
" square measure	234
Surplus, Definition of.....	174
Syndicate, Definition of.....	174
System, for a law office.....	208
" for correspondence	192
" for soliciting, A.....	205
" of filing, Numerical	211
" Metric	276
Systems, Card	180
" of bookkeeping	108

Systems, Geographical.....	250
" of interest, discount, etc.....	262
" of use in printing	244
" of weight, measure, etc.....	228
Tack, Definition of.....	174
Tax bond, Definition of.....	174
Temporary signs	135
Tenant, Eviction of	40
Tennessee, Chattel mortgage laws of.....	58
" Eight-hour law of.....	82
" Exemption laws of.....	48
Testament, Definition of.....	62
Texas, Chattel mortgage laws of.....	58
" Eight-hour law of.....	82
" Exemption laws of.....	48
Third-class mail matter.....	93
Tierce, Equivalent of a.....	229
Title, Printed, required in copyrighting.....	71
Time, Aliquot parts of.....	272
" at which money doubles at interest.....	266
" loan, Definition of.....	174
Time-recording	129
Time, Standard	239
Torts	7
Ton, Aliquot parts of.....	272
Ton-miles, Definition of.....	174
Ton-mileage, Definition of.....	174
Trade information a source of credit knowledge....	104
Transfer agent, Definition of.....	175
Train-mileage, Definition of.....	174
Train miles, Definition of.....	174
Transit of goods.....	6
Translations	73
Traveler's letter of credit, Definition of.....	175
Treasury stock, definition of.....	27
Trial balance, tracing errors in.....	109
Troy measure	228

Troy pound, Comparison of	228
" Equivalents of	228
" Standard	228
Trust company card.....	185
" Definition of.....	31
Tun, equivalent of a.....	229
Turn over, Definition of.....	175
Type, body, Rule for estimating.....	244
" faces	149
" Classification of by faces.....	149
" Sizes of	149
Types, Conformity of to medium.....	148
" Indicating the use of.....	141

U

UNDERLYING MORTGAGE, DEFINITION OF.....	175
Unfunded debt, Definition of.....	175
Unissued stock	26
United States, Coins of the	273
" " Eight-hour law of.....	82
Unity, Measure of.....	237
Unlimited agency, Definition of.....	21
Unlawful contracts	4
Use of capitals, Rules for the.....	242
" card systems	181
Utah, Chattel mortgage laws of.....	58
" Exemption laws of.....	48
Utter, Definition of.....	175

V

Value of Property.....	119
Vermont, Chattel mortgage laws of.....	58
" Exemption laws of.....	49
Vertical filing, Advantages of.....	212
Via, Definition of.....	175
Virginia, Chattel mortgage laws of.....	59
" Exemption laws of.....	49

Voting, Cumulative	31
“ Qualifications for	261
“ trust, Definition of.....	175

W

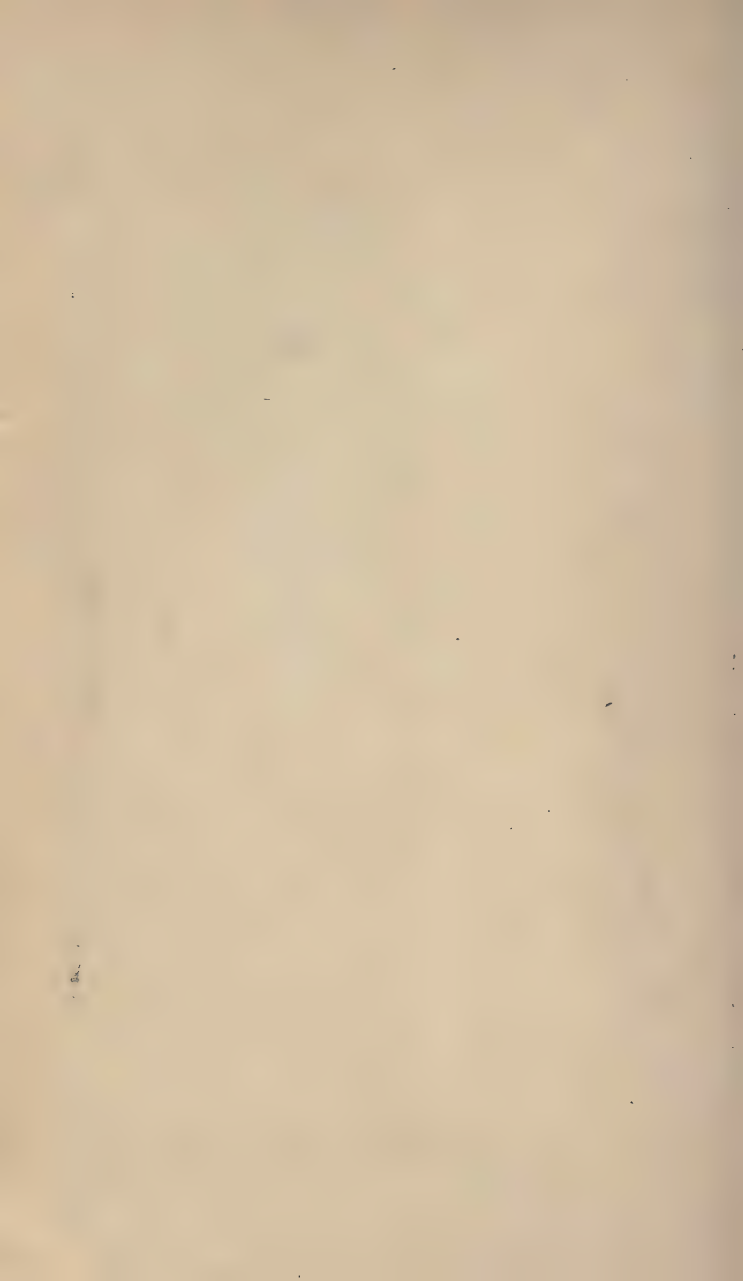
WAGES, ANALYSIS OF.....	129
Wanamaker, John, Business advice by.....	220
Want cards, Filing of.....	198
Warranties, Three implied, in marine insurance....	37
Warranty of sales.....	7
Washington, Chattel mortgage laws of.....	59
“ Eight-hour law of.....	82
“ Exemption laws of.....	49
Watered stock, Definition of.....	28
Watering stocks, No law against.....	28
Weight, Tables of	228
West Virginia, Chattel mortgage laws of.....	59
“ “ Eight-hour law of.....	82
“ “ Exemption laws of.....	49
When issued, Definition of.....	175
Wildcat investments	114
Will, Definition of.....	62
“ Those competent to make a.....	62
“ Witnesses required to.....	63
Window signs	135
Window-dressing	131
“ “ Objects of	133
“ “ Special features in.....	133
Wine or liquid measure.....	229
Wisconsin, Chattel mortgage laws of	59
“ Eight-hour law of.....	82
“ Exemption laws of.....	49
“With exchange,” Definition of term.....	13
Work and stock orders.....	130
Working by schedule, Method of.....	155
“ capital, Definition of.....	175
“ up city trade.....	191

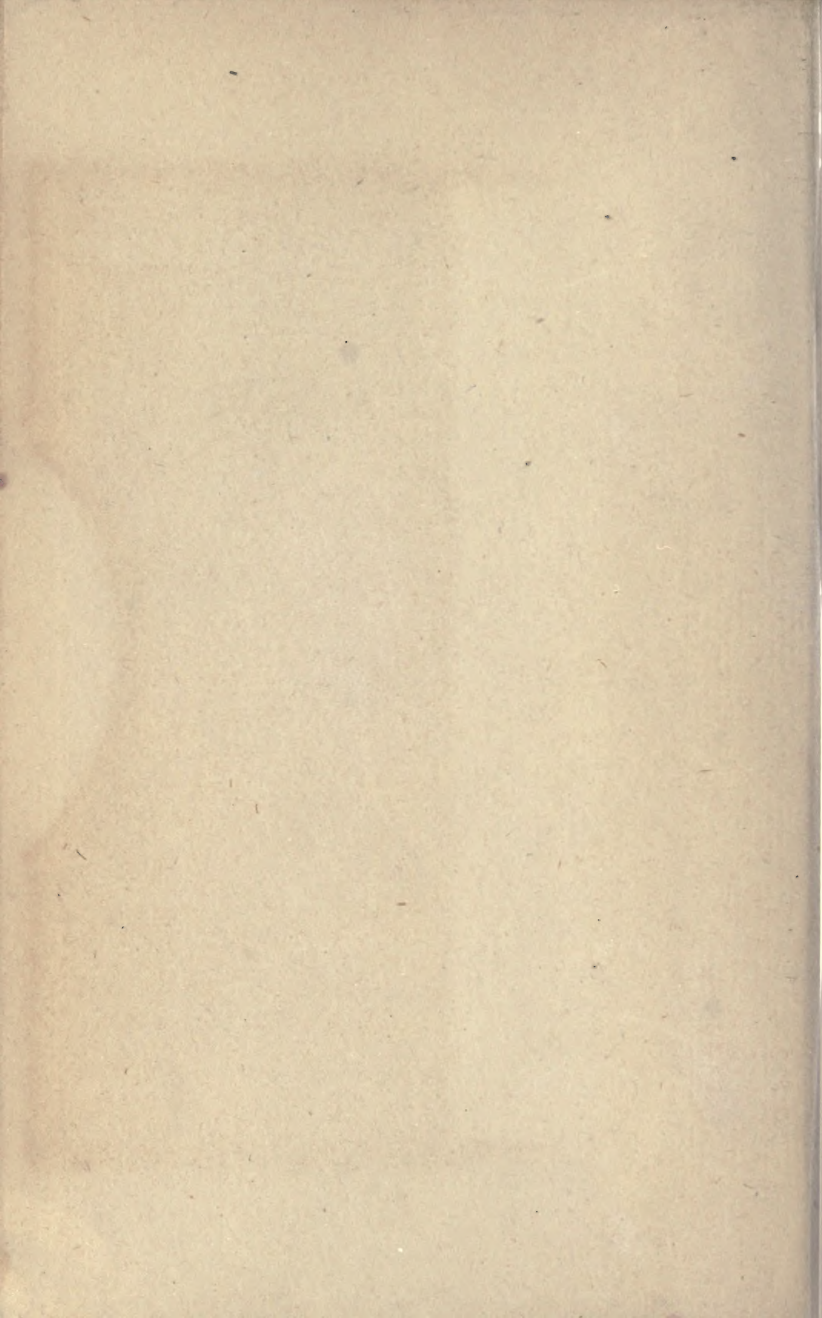
Words of grant in lease.....	40
Written contracts	3
Wyoming, Chattel mortgage laws of.....	59
" Eight-hour law of.....	82
" Exemption laws of.....	49

X-Y

X, DEFINITION OF.....	175
Yield, Definition of.....	175







371791

The Business man's encyclopedia.
[vol.2]

ECC
B9783

**University of Toronto
Library**

**DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET**

Acme Library Card Pocket
LOWE-MARTIN CO. LIMITED

